



Changing Patterns of Migration and Remittances: A Case Study of Rural Ghana

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Abstract

Using a migration dataset on Ghana, this paper examines the changes in migration and remittance patterns of households interviewed in 2015 and 2018. Our findings indicate that migration statuses of a majority of household members have not changed in the last three years. While political narratives suggest exodus of Africans to Europe, our data shows that a majority of migrants moved to destinations within Ghana and Africa. Although a larger proportion of emigrants in Ghana is made up of males, migration streams are being feminized. Our multivariate analysis shows that social networks are strong determinants of migration. We also observe gender differences in the reliance on social networks to facilitate migration, with women being more likely to have contacts at destination prior to migrating. A majority of migrants in both waves depended on their personal savings for migration. The proportion of migrants funding their trips through loans from family and friends have increased between 2015 and 2018, while the proportion that financed migration through borrowing outside the family and sale of assets declined. Our data shows that annual real cash remittance received by households over the three-year period have increased by about 27% in 2018 and that many of the migrant households left behind have reportedly depended on remittances to enhance wellbeing. The findings suggest the need for policy makers to develop programmes to leverage remittances for development.

Executive Summary

While migration is an integral part of livelihoods in many parts of the World, there are contesting views on its actual developmental outcomes. Despite the recent recognition that migration can contribute to improved livelihoods migrants and their families, there is a general paucity of data on migration patterns and the relationship between migration and wellbeing of migrants' households. In Africa, most of the earlier studies on the benefits of migration have focused on international migration, although many African migrants move to destinations within the region. While a few researchers have examined the developmental impacts of internal migration in some countries in Africa, these assessments are largely based on cross sectional data. There is a general lack of longitudinal data on migration flows and their impacts of welfare. This paper draws largely on longitudinal household survey data generated in 2015 and 2018 in five dominant migrant-sending regions of Ghana (i.e. Northern, Upper East, Upper West, Brong Ahafo, and Volta regions) to examine changes in migration and remittance patterns of households interviewed in rural Ghana in 2015 and 2018.

The findings indicate that most households and their members have the same migration status in 2018 as they did in 2015. In 2018, only 15% of persons categorized as non-migrants in 2015 had migrated, with 12.8% of them becoming internal migrants by 2018. About 7.6% of the persons listed as internal migrants and 2.9% international migrants in 2015 had returned by 2018. About 21.2% of the internal return migrants and 25% of international return migrants in 2015 had re-migrated internally as of 2018. The findings show that re-migration is quite common among both internal and international return migrants.

An analysis of the destinations of migrants indicate that in both 2015 and 2018, over 80% of the current (absent) migrants moved to another community within Ghana, with a majority of them (65% in 2015 and 60% in 2018) moving across regions in Ghana. A significant proportion of the few international migrants migrated to destinations within Africa. In 2018, only 7.2% of the migrants from the five regions were living at destinations outside Africa. There is a significant relationship between region of origin and destination of migrants. The proportion of migrants that travelled to destinations outside Ghana was highest in Brong Ahafo region, which is the most resource-endowed region among the five regions studied. The proportion of migrants moving across regions tend to be consistently highest in the Upper East and Upper West regions, which are relatively poorer than the other regions.

With particular reference to the drivers of migration, our data shows that spatial inequalities in job opportunities largely account for migration in Ghana. Economic factors (e.g. the need to seek work or better jobs) were cited as the main reasons for migration in both 2015 and 2018. One of the important factors that facilitates migration in both 2015 and 2018 is social networks. In both waves, the proportion of migrants that had a contact at the destination prior to migration was

higher among women than men. The result suggests that more males take risks in terms of migrating without a contact person, in comparison with females. Whilst households within lower income quintiles were more likely to have a migrant in 2015, in 2018 there was no clear-cut relationship between income quintiles and migration, and this is an indication that other drivers of migration are becoming more important than poverty.

Responses from households left behind and interviews with rural-urban migrants in Accra indicate that many migrants have been contributing positively to wellbeing of household members left behind, through remittances. The average annual cash remittances sent by both males and females increased significantly between 2015 and 2018. Male migrants sent more remittances, on average, than female migrants in both 2015 and 2018. This may be explained by lower wages for women in the informal sector, which means that they send smaller amounts (Teye et al, 2017). However, the percentage increase in the mean amount of remittances sent between 2015 and 2018 was almost the same (27% for men and 28% for women). International absent migrants sent more on average than internal absent migrants. This is highly expected as wages are on average relatively higher for international migrants than for internal migrants.

Our assessment indicates that in both 2015 and 2018, the proportion of respondents that reported that their financial situation had improved within the last five years, prior to the studies, was highest among households with migrants than those without migrants. Our results confirm the findings in the literature that households with migrants, particularly with international migrants, tend to have enhanced household welfare compared to households without migrants (Adams, 2007). Consistent with the survey data, a majority (71%) of the rural-urban migrants interviewed in Accra reported that their current wellbeing is better than it would have been if they had remained at origin. Based on these findings we conclude that current policy initiatives that seek to discourage rural-urban migration are not likely to achieve desired results unless spatial inequalities in development are addressed. We argue that there is a need for policy makers and development partners to develop programmes to harness the benefits of migration for poverty reduction.

1. Introduction

While migration is an important livelihood strategy adopted by individuals and households to improve living standards (de Haas 2010; Awumbila *et al.* 2014; Teye *et al.* 2017), there are contesting views on its effects on welfare of migrant households and socio-economic development in migrant sending areas (Murrugarra *et al.* 2011; Mendola, 2011). Until recently, media and academic discussions on migration largely focused on its negative developmental impacts, such as pressure on social services in migrants' destinations and brain drain in migrant-sending areas (Ajaero and Onokala 2013). However, recent scholarship has shown that migration, if properly managed, can contribute to socioeconomic development in both migrants' sending and receiving communities (Teye *et al.* 2017; UNDESA 2019).

As a result of this more sanguine perspective on the developmental impacts of migration, it was, in 2015, included in the 2030 Global Development Agenda and the Sustainable Development Goals (SDGs). The 2030 Agenda for Sustainable Development recognized the positive contribution that migrants make to inclusive growth and sustainable development in countries of origin, transit and destination (OECD/ILO 2018). About 10 of the 169 targets of the Sustainable Development Goals (SDGs) refer to migration-related issues. Despite the recognition that migration can contribute to improved livelihoods and socio-economic development, there is a general paucity of data on the relationship between migration and wellbeing of migrants' households (Awumbila *et al.* 2014).

In Africa, most of the earlier studies on the effects of migration have focused on international migration (see for instance, Mazzucato *et al.* 2005; Quartey 2006; Ratha *et al.* 2010), although internal migration is more common in the region (Teye *et al.* 2015). While a few researchers have examined the welfare impacts of internal migration in some African countries (see Litchfield and Waddington 2003; Castaldo *et al.* 2012), these assessments are largely based on cross sectional data. Relying on panel data generated in 2015 and 2018, this paper examines the effects of internal and international migration on the welfare of migrants' households in Ghana. The paper provides a detailed analysis of the changes in the incidence of migration, reasons for migration, destination of migrants, remittances and welfare of migrants' households in Ghana.

2. Literature Review

As a way of providing an illuminating context for the subsequent discussions in this paper, this section presents a review of the literature on key migration concepts, the drivers of migration and patterns of migration with specific reference to Ghana.

2.1 Defining Migration

Although migration is, historically, an aspect of life, it entails different types of movements (Awumbila et al, 2014). Because of this diversity, there is no universally accepted definition for the process. The Ghana Statistical Service (GSS) defines a migrant as a person who has moved and stayed at his/her current place of residence for at least one year (GSS 2008). This definition does not cover seasonal migrants, who usually move and stay at their destinations for less than a year. Following previous Migrating out of Poverty studies, we used migration to refer to the movement of people across a territorial boundary often involving a change in their place of usual residence. Drawing on Bilsborrow et al (1984: 146) we define a migrant as anyone who used to live in the household and left to go away from the village/town/city in the past 8 years, and with duration of absence, or intended absence, of at least 3 months. This definition allowed us to cover seasonal migrants. The current migrant category was further divided into internal migrants (those who moved from one geographical area to another geographical area within Ghana) and international migrants (those who moved from Ghana to another country). We also used the term return migrant to refer to an individual who had been away from his or her usual residence for at least 3 months, and who has returned to his native place and lived there for at least 12 consecutive months before the study. Defined this way, migrants' households are those that have at least one migrant during the time of the survey. Non-migrant households do not have any category of migrant during the time of the study.

2.2. Theoretical Perspectives on Drivers of Migration

There are a number of theories that can be relied upon to explain the drivers of migration in Ghana. These include the Neo-Classical Economic Theory, Push-Pull Theory, New Economics of Labour Migration theory, and Network theory among others. The Neo-Classical Economic Theory explains migration decision-making processes in terms of geographical differences in the supply and demand for labour. It argues that individuals tend to take the decision to move from labour-surplus, low wage areas to labour scarce, high wage areas. The theory further suggests that migration will eventually bring about convergence in wages at the sending and receiving areas, and this will reduce migration flows (Todaro and Maruszko 1987). Although the theory can be criticized for not recognising the role of other household members in migration decision making and also for ignoring the role of social factors in shaping migration decisions, it can be credited for explaining how wage differentials shape migration decisions of individuals. Some studies have shown that rural-urban migration in Ghana is largely driven by wage differentials (see Abdulai 1999, GSS 2014).

The 'Push-Pull' theory of migration posits that migration is driven by pull and push factors operating in the areas of destination and origin. The pull factors are favourable conditions which attract migrants to the destination, while the push factors are the unfavourable conditions that drive people away from the origin (Lee 1966). The theory also argues that apart from the pull and push factors, migration decisions are shaped by intervening obstacles, such as cost of migration, immigration laws and psychological stress of leaving relatives behind. A major limitation of the theory is its failure to explain how different groups will respond differently to the various push and pull factors (de Haas 2008). However, the theory is useful for explaining the factors that push people to migrate from poor regions to resource-rich regions in Ghana.

Having criticized the neoclassical theory for assuming that migration decisions are only taken by individuals, the New Economics of Labour Migration (NELM) theory posits that migration decisions are often taken by households to diversify livelihoods and insure the household against future risks (Stark 1991). Households may decide that one or more of their members should migrate, not just to get higher wages, but also to minimize risks and diversify income sources. In rural areas, remittances from migrants can be used during periods of low harvest. The theory can be applied to explain migrants send remittances back to their families left behind. During the economic crisis in Ghana in the 1970s and 1980s, migration became a survival strategy for families which depended on remittances (Awumbila et al. 2011)

The migration network theory suggests that migration flows are shaped by interpersonal ties that connect migrants, former migrants, and non-migrants in origin and destination areas through bonds of kinship, friendship, and shared community origin (Massey et al 1993:448). Although this theory can be criticised for ignoring economic drivers of migration, it is useful for explaining the role of social networks in migration flows and livelihoods of migrants at the destination (Teye and Yebleh 2015).

Our review of the literature on the drivers of migration in Ghana suggests that no single theory can fully explain all the different types of migration, given the fact that the drivers of migration are complex and multifaceted. In many cases, people take the decision to migrate in response to a combination of environmental factors (e.g land degradation, declining rainfall, and desertification at origin) (GSS 2014), economic factors (e.g. unemployment, low wages and poverty at origin) (see Awumbila et al 2014) and socio-cultural factors (e.g. to join a spouse, desire to free from traditional practices and control by elders) (Anarfi et al. 2003).

2.3. Patterns of internal migration in Ghana

Migration has historically been an important livelihood strategy in Ghana (Awumbila et al 2011). Current internal migration trends are deeply rooted in historical antecedents. In the pre-colonial

era (before 1874), migration in what is now seen as Ghana were driven by human needs such as favourable ecological conditions, fertile land for agriculture, trade, and greater security during tribal warfare (Ghana Statistical Service 2014). Most of the ethnic groups in Ghana have moved to the present locations in search of better ecological conditions and safe havens (Yaro, 2008). Most of the movements in the pre-colonial era were not actually seen as cross border migration, since the West African sub-region was seen as a borderless area within which goods and people moved freely (Adepoju, 2005).

Colonial economic and political structures changed the direction and composition of migration. For instance, contract and forced labour legislation prompted the movement of labour migrants from the northern savannah zone to the mining and plantation areas in southern Ghana (Anarfi and Kwankye, 2003). Based on the assumption that the Northern Territories did not have any direct economic value, the colonial administration, in the 1920s, designated the northern zone as a labour reserve for the supply of cheap labour for the mines and general labour in the cities in southern Ghana (Ghana Statistical Service, 2014). Many of the north-south migrants were predominantly unmarried young men (Amin, 1974),

After independence in 1957, north-south disparities continue to drive migration from the northern zone to the south. In many cases, people tend to move from poor regions to wealthier regions and cities in Southern Ghana. Many of the poor people who migrate from northern Ghana tend to move to the forest zone to work as farmers. However, a significant proportion of young men and women also continue to move to cities in southern Ghana. The main pull factors of internal migration in Ghana are employment, income and other economic opportunities which are available in the southern urban centres, but limited in the northern and rural areas (GSS 2014). Recent scholarship has shown that although migration is increasingly being feminised in Ghana, males still dominate migration streams (Awumbila et al 2014). In terms of age, a majority of migrants in Ghana are young adults (Ghana Statistical service, 2014).

2.4. International migration from Ghana

Ghana also has a long history of international migration. From the pre-colonial era to the late 1960s, Ghana's economy was very strong and therefore received migrants from neighbouring West African Countries (Anarfi et al. 2003). During this period, only a few Ghanaians, mainly students and professionals, migrated to English speaking countries, such as United Kingdom and United States of America. The pattern of international emigration changed in the 1970s and 1980s as worsening economic conditions and political instability forced many Ghanaians to migrate to African countries, notably Côte d'Ivoire and Nigeria as well as destinations outside Africa, notably Germany, Italy, UK and United States of America. While many Ghanaians continue

to move to these countries, the destinations of Ghanaian emigrants have become more diverse in recent years (Quartey 2009; Teye et al, 2017).

Estimates of the number of Ghanaians in various countries, however, vary widely due to paucity of data. According to Twum Baah (2005), about 1.5 million Ghanaians were living outside the country. Figures provided by UN DESA, however, indicated that the number of Ghanaians staying in other countries increased from 470,000 in 2000 to 720,000 in 2010 (53% decadal increase) and then 860,000 in 2017. Despite media reports and political narratives which suggest an exodus of African migrants to Europe, the majority of Ghanaian emigrants have moved to destinations within the West African region. While Quartey (2009) estimated that about 71% of the Ghanaian emigrant population resides in ECOWAS countries, a recent assessment by the UN DESA (2018) indicated that about 48.7 % of Ghanaian resides in ECOWAS countries. Outside Africa, the major destinations of Ghanaian emigrants are in Europe, followed by North America. A gendered analysis of emigrants profile of the five top destinations shows that while males dominate Ghanaian emigrant stock in countries such as Italy (61% males vs. 39% women), US (59% males vs. 41% women), Nigeria (55% males vs. 45% women), women dominate the Ghanaian emigration stock in other countries such as Togo (41% males vs. 59% women) and UK (47% males vs. 53% women) (UN DESA 2018).

While West Africa, Europe and the United States of America have traditionally been the popular destinations for Ghanaian migrants, recent data shows a massive flow of migrants, especially women, to the Gulf States. This is partly due to strict visa regimes in European and North American countries as well as increasing demand of domestic workers in the Gulf States. According to figures provided by Ghana Labour Department, in the year 2015, a total of 1,550 Ghanaian workers were formally recruited by private employment agencies for job placement in four Gulf States, namely Saudi Arabia, United Arab Emirates, Qatar and Kuwait with the assistance of Private Employment Agencies. In 2016, the total number of migrants to the four countries and Jordan was 2,372. Despite the fact that the government placed a ban on visas to the region in June 2017, there is enough evidence to suggest that many Ghanaians still continue to migrate to these countries.

3. Research Methodology

We draw largely on quantitative analysis of longitudinal household survey data, specifically a three-wave panel, which is supported by a smaller qualitative data generated through interviews with migrants in Accra and Tema. Our earlier MOOP data consists of two waves of panel data (2013 and 2015), with 1412 households in March 2013 survey round and 1100 households surveyed in March 2015 in five dominant migrant sending regions of Ghana (i.e. Northern, Upper

East, Upper West, Brong Ahafo, and Volta). The 2015 study was designed to provide the basis for a further round of data collection by eliciting consent to record and retain contact and location details of the 1114 households.

In the 2018 study, we did not simply re-survey the 1114 households. Rather we made a number of methodological improvements, based partly on our experience of conducting the second wave in 2015. Two strategies were employed to address attrition and increase the sample size back to around 1400 (i.e. the 2013 figure). First, in each enumeration area, we made efforts to randomly select replacement households with similar characteristics to the households who have dropped out (since 2015 survey) based on whether they were a household with or without migrants at the time of the 2015 wave. The second strategy involved measures to increase the sample size to about 1400 and also to include more households with international migrants. The first two waves were designed to capture households with internal migrants, resulting in a very small number of households being identified with international migrants. To increase the sample size and also the number of households with international migrants, we made efforts to randomly select 3 additional households with international migrants, in each enumeration area. These two strategies worked quite well, leading to an overall increase in the number of households to 1429.

In addition to data collection at the migrant source regions, we tracked migrants to Accra and Tema and interviewed them. Using contacts provided by members of the migrants' former household at the origin, we tracked 79 of the recent migrants from the second survey (2015) to their destinations in Accra and Tema and conducted a questionnaire survey on them. The questionnaire survey on the 83 in-migrants aimed at collecting data on the migration process, well-being outcomes and other social and economic outcomes (e.g. employment, education acquisition, age at first marriage etc). The migrants also provided information on what they would have been doing and earning if they had not migrated to Accra. This innovation would allow us to compare results obtained from the econometric analysis of the data from the migrant-sending households with those obtained from a more qualitative approach to understanding how migration benefits households and migrants. The findings of this paper are however largely based on the quantitative data collected at the origin in 2015 and 2018.

4. Patterns and Characteristics of Migrant and Non-Migrant Households

Economic reasons for migration give primacy to Ravenstein's (1885) sixth law that individuals move in order to 'better' themselves (Hoddinott 1994; de Haas 2010). Therefore, the destination options available to the individual shapes migration decisions. For this reason, this section begins by describing the destination of migrants across the two survey waves (2015 and 2018) of the study and then proceeds to describe the incidence of migration by key individual and household characteristics. Also, taking advantage of the panel nature of our data, we examine the extent to which migration status of individuals and households have changed since the last survey in 2015. Lastly, we explore characteristics of migrant and non-migrant households focusing on changes in assets and well-being over the period of the study.

4.1 Changes in Migration Status of Households

The findings show that majority of households in the study regions have at least one migrant in another community. The proportion of households without any migrants declined from 48.7 % in 2015 to 30.7% in 2018. As shown in Table 1a, in all the regions studied, the proportion of households with internal migrants increased significantly between 2015 and 2018, except the Brong Ahafo region, where the proportion of households with internal migrants declined from 36.8% to 28.8%. This may be explained by the fact that the Brong Ahafo region is relatively economically stronger and rather attracts internal migrants. The proportion of households with international migrants rose quite significantly in all the regions between the two waves except the Upper West region where the change was minimal. However, care must be taken in explaining the rise in the proportion of international migrants' households due to the sampling strategy adopted.

Table 1a: Migration status of all sampled households in 2015 and 2018

	(Proportion of households with different categories of migrants and non-migrants)											
Region	Internal current		International current		Internal returned		International returned		Non-migrant		Total Number of households	
	2015	2018	2015	2018	2015	2018	2015	2018	2015	2018	193	2018
Brong Ahafo	36.8	25.2	13.5	28.8	7.3	1.8	1	4.4	41.5	39.8	258	274
Northern	27.9	48.4	1.2	3.9	24.0	7.5	0.4	1.4	46.5	38.8	193	281
Upper East	41.5	55.7	5.2	12.7	10.4	3.5	1	0.9	42	27.2	167	228
Upper West	40.1	55.4	0.6	7.1	12.6	13.6	0	0.5	46.7	23.4	303	184
Volta	28.4	53.7	2.0	11.5	8.9	6.9	0.3	3	60.4	24.9	1114	462
Total	33.8	47.7	4.1	12.9	12.9	6.4	0.5	2.3	48.7	30.7	193	1429

Even though our pooled analysis is interesting, we proceed to take advantage of the panel nature of our data to explore changes in the migration status of the sub-sample of households who were successfully tracked over the two periods. Changes in migration status of successfully tracked households are presented in Table 1b. For households successfully tracked, the proportion of without any migrant declined from 49.3 % in 2015 to 38.2% in 2018. As presented in Table 1b, the Upper West region recorded the highest decline in the proportion of households without any migrant. Specifically, the proportion of households without a migrant for the Upper West region declined from 48.3% to 24.5%. This observed result suggests high levels of migration among households who were successfully tracked in the Upper West Region. Even though the Upper West Region experienced the highest increase in household level migration, a majority of such migration were internal, as reflected in an increase in internal migration from 39.5% in 2015 to 60.5% in 2018. With this high migration incidence in households successfully tracked in Upper West region, interestingly the region did not experience any form of international migration.

Another worth-mentioning result for the successfully tracked households is that, for the Brong Ahafo region, the number of households without a migrant did increase from 41.8% in 2015 to 53.3% in 2018. Also, with the exception of the Upper West region, the proportion of households

with internal returned migrants reduced over the period of the study. Upper West region experienced an increase in the proportion of households with internal returned migrants.

Table 1b: Migration status of successfully tracked households in both 2015 and 2018

Region	Internal current		International current		Internal returned		International returned		Non-migrants		Total number of households
	2015	2018	2015	2018	2015	2018	2015	2018	2015	2018	
Brong Ahafo	36.9	32.8	12.3	9.0	8.2	3.3	0.8	1.6	41.8	53.3	122
Northern	24.0	47.5	1.5	3.1	25.0	6.6	0.0	0.5	49.5	42.4	196
Upper East	41.0	57.1	4.4	3.1	10.6	4.4	0.6	0.6	43.5	34.8	161
Upper West	39.5	60.5	0.0	0.0	12.2	15.0	0.0	0.0	48.3	24.5	147
Volta	30.4	50.5	2.5	5.4	7.8	5.4	0.5	1.0	58.8	37.8	204
Total	33.5	50.2	3.6	4.0	13.3	6.9	0.4	0.7	49.3	38.2	830

Table 1c presents changes in migration status of all households who were interviewed in 2015 and were successfully tracked in 2018. About 71.2 percent of households with an internal current migrant in 2015 still had internal migrants in 2018, while about 6 percent had returned internal migrants in 2018 and about 19.8 percent no longer had migrants in 2018 due to reasons like falling out of the household or death. For households with international current migrants in 2015, about 43.3 percent still had such migrants in 2018 but 30 percent had internal migrants in 2018 (the migrants returned but chose to stay elsewhere in Ghana). About 23 percent had no migrant in 2018, probably due to migrants falling out of the household or possibly death. For households that had internal returned migrants in 2015, the majority (51.8%) of them had their migrants moved again to become internal current migrants in 2018. Just about 11 percent were still categorised as having an internal returned migrant while 33.6 percent no longer had any form or migrants in 2018.

While 53.3 percent of non-migrant households interviewed in 2015 still have no migrant in 2018, approximately 37 percent of them have become internal current migrant households and 2 percent have become international current migrant households. Over the three-year period, 6.8% of non-migrant households in 2015 have become internal returned migrants. This means that within the three year period some members of these households migrated and returned. Also, the data shows that 0.7% of non-migrant households in 2015 have become international returned migrant households in 2018.

Table 1c: Transition matrix of household migration status

		2018											
		Internal current		International current		Internal returned		International returned		Non-migrant		Total	
	Migration status of households	N	%	N	%	N	%	N	%	N	%	N	%
2015	Internal current	198	71.2	8	2.9	17	6.1	0	0	55	19.8	278	100
	International current	9	30	13	43.3	0	0	1	3.3	7	23.3	30	100
	Internal returned	57	51.8	3	2.7	12	10.9	1	0.9	37	33.6	110	100
	International returned	1	33.3	1	33.3	0	0	1	33.3	0	0	3	100
	Non-migrant	152	37.2	8	2	28	6.8	3	0.7	218	53.3	409	100
	Total	417	50.2	33	4	57	6.9	6	0.7	317	38.2	830	100

We also explore changes in migration status for individuals interviewed in both waves. The evidence, as presented in Table 1d, shows that most people have the same status in 2018 as they did in 2015. Precisely, in 2018, the migration status of only 15% of the 4298 persons categorized as non-migrants in 2015 had changed. Thus, while 3655(85%) of people interviewed in 2015 were still non-migrants, 549(12.8%) were internal migrants and 18(0.4%) were international migrants by 2018. The data shows that that emigration rate within the African regions is quite high compared with international migration. In addition, the data shows that 34 (7.6%) of the 446 persons listed as internal migrants in 2015 had returned by 2018. Following a similarly pattern, 79.4% of the 34 international migrants in 2015 were still international migrants while 2.9% had returned. The study also shows that a majority (78.8%) of the 170 internal return migrants in 2015 were still internal return migrants in 2018, meaning that they have remained at their usual places of residence between 2015 and 2018. However, another 36 (21.2%) of the internal return migrants in 2015 had re-migrated internally as of 2018. While 1 of the four international return migrants in 2015 was still at the origin, one has re-migrated to an international destination while another 1 has re-migrated internally. The findings imply that re-migration is quite common among both internal and international return migrants. This may suggest that a number of the migrants did not adequately prepare for their return. Re-migrations also imply that migrants re-integration processes are not quite effective

Table 1d: Migration status of individuals in 2018

Migration status of individuals in 2015	Non-migrants		Internal migrants		International current		Internal returned		International returned		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Non-migrants (4298)	3655	85	549	12.8	18	0.4	71	1.7	5	0.1	4298	100
Internal migrant (446)	0	0	412	92.4	0	0	34	7.6	0	0	446	100
International migrant (34)	0	0	6	17.6	27	79.4	0	0	1	2.9	34	100
Internal returned migrant (170)	0	0	36	21.2	0	0	134	78.8	0	0	170	100
International returned migrant (4)	0	0	2	50	1	25	0	0	1	25	4	100
Total	3655	73.8	1005	20.3	46	0.9	239	4.8	7	0.1	4952	100

4.2. Destination of current migrants

We examined the destination of migrants: the 706 and 1584 migrants recorded in 2015 and 2018 respectively. As shown in Table 2a, in both 2015 and 2018, over 80% of the current (absent) migrants moved to another community within Ghana, with a majority of them (65% in 2015 and 60% in 2018) moving across regions in Ghana. Migration within the same region is also quite high

for both years, with nearly 22% of migrants in 2015 and 18% of migrants in 2018 moving to another district in the same region. The proportion of migrants that moved across international boundaries was very low in both waves.¹ A significant proportion of the international migrants were in destinations within Africa. In 2018, only 7.2% of the migrants from the five regions were living at destinations outside Africa. These findings are consistent with recent observations that while political narratives and media images suggest an exodus of Africans to the global north, Africa has the lowest intercontinental outmigration rates of all world regions (Flahaux and De Haas 2016). Our evidence also supports data which shows that In the West African sub-region, a majority of migrants (71.7%) move to destinations within the region (UNDESA, 2018).

Table 2a: Destinations of all migrants from surveyed regions

Destination of absent migrants	2015		2018	
	N	%	N	%
In a different community within this district	49	6.9	132	8.3
In another district in the same region	153	21.7	281	17.7
In another region in Ghana	456	64.6	949	59.9
International (Africa)	42	6.0	108	6.8
International (Europe)	4	0.6	50	3.2
International (Americas)	2	0.3	40	2.5
International (Asia and Middle East)	0	0.0	24	1.5
All	706	100.0	1,584	100.0

We also made efforts to explore the association between destination for international migration and the migrant's region of origin. The data, as presented in Table 2b, shows that in both 2015 and 2018, migration from all the 5 regions were largely directed towards another region in Ghana. The proportion of migrants that travelled to destinations outside Ghana was highest in Brong Ahafo region (16.9% in 2015 and 30.1% in 2018) which is the most resource endowed region among the five regions studied. The proportion of migrants moving across regions tend to be consistently highest in the Upper East and Upper West regions which are relatively poorer than the other regions. Consistent with the Mobility Transition Theory (see Zelinsky, 1971), our findings suggest that poorer regions (e.g. Upper East and Upper West regions) tend to produce internal migrants, while resource rich regions (e.g. Brong Ahafo) tend to produce international migrants.

¹ In 2015, we had few international migrants due to our sampling approach.

Table 2b: Origins and Destinations of Migrants

Destination of absent migrants	Region of Origin of Migrant					
	Brong Ahafo	Northern	Upper East	Upper West	Volta	All
	2015					
In a different community within same district	14.5	10.6	1.3	1.9	5.3	6.9
In another district in the same region	26.7	26.0	10.1	25.2	22.5	21.7
In another region in Ghana	41.9	60.6	85.4	71.8	66.3	64.6
International (Africa)	15.7	2.9	1.9	1.0	4.7	6.0
International (Europe)	1.2	0.0	0.6	0.0	0.6	0.6
International (Americas)	0.0	0.0	0.6	0.0	0.6	0.3
International (Asia and Middle East)	0.0	0.0	0.0	0.0	0.0	0.0
All	100.0 (N=	100.0	100.0	100.0	100.0	100.0
	2018					
In a different community within this	8.7	10.5	4.5	5.3	10.4	8.3
In another district in the same region	15.3	32.2	8.6	14.5	18.1	17.7
In another region in Ghana	36.2	51.7	75.4	72.5	60.2	59.9
International (Africa)	19.2	2.3	4.8	1.0	7.2	6.8
International (Europe)	10.9	1.1	3.5	1.9	1.2	3.2
International (Americas)	3.9	0.4	2.6	4.4	2.3	2.5
International (Asia and Middle East)	5.7	1.9	0.6	0.5	0.5	1.5
All	100.0	100.0	100.0	100.0	100.0	100.0

In order to further throw more light on internal migration dynamics, we examined the specific regions where internal migrants moved to both in 2015 and 2018. Table 2c present such results.

Table 2c: Regions of Destination of Internal Migrants

Region	2015		2018	
	N	%	N	%
Brong Ahafo	70	10.8	150	11
Northern	35	5.4	153	11.2

Upper East	32	4.9	45	3.3
Upper West	30	4.6	47	3.4
Volta	54	8.3	161	11.8
Western	-	-	39	2.9
Central	-	-	31	2.3
Greater Accra	-	-	442	32.4
Eastern	-	-	36	2.6
Ashanti	-	-	262	19.2
In another region in Ghana	426	65.8	-	-
Total	647	100	1366	100

Out of the total of 1,366 internal migrants surveyed in 2018, about 32.4% currently live in the Greater Accra region which is the most urbanized region of Ghana. The story is not very different from the situation that persisted in 2015 when about 65.8% of the 647 internal migrants moved to regions outside the 5 regions surveyed for our study.² In 2018, the Ashanti Region was the second major destination for internal migration from our survey regions, with 19.2 percent of internal migrants from our surveyed regions currently residing in the Ashanti Region. The high proportion of internal migrants residing in the two most urbanised regions in Ghana (Greater Accra and Ashanti regions) can be attributed the level of economic activities and employment options available in these two regions. The findings support earlier reports which suggest that migrants in Ghana tend to move to urbanised regions (GSS 2007; Awumbila et al, 2014). Largely as a result of rural-urban migration, the proportion of Ghana's population living in urban areas increased from 43.8% in 2000 to 50.9 per cent in 2010 and is projected to increase to 63 per cent by 2025 (GSS 2012).

In terms of changes in internal migration destinations over the two periods, the data shows that migration to the Northern Region has increased considerably over the 3 years of the study. Whereas in 2015, only 5.4 % of internal migrants from the five sampled regions lived in the Northern Region, in 2018 the proportion that lives in the Northern Region was 11.2%. Similarly, the proportion of internal migrants living in the Volta region increased from 8.3% in 2015 to 11.8% in 2018. The movement of migrants towards the Northern and Volta regions is attributed to recent regional development initiatives implemented in these regions. The northern region, in particular, has seen rapid expansion in infrastructure and upgrading of its airport which has made migration to the region relatively easier. As a result of the general lack of economic opportunities, the Upper East and Upper West regions are still not popular migrant destinations in Ghana.

² In 2015, we did not ask for the breakdown of the internal destinations outside the 5 surveyed areas.

We have so far analyzed the destination of migrants treating the data as separate waves. We complete the analysis by examining possible changes in destination of successfully tracked migrants. The data, as presented in Table 2d, shows that out of the number of migrants 'in a different community within the same district', 21.4% are still in a different community within the same district whilst 28.6% have moved to other districts in the same region. We observe high incidence of cross-regional migration. We find that 50% of migrants in a different community within the same district in 2015 have now moved to another region in Ghana. The fact that many of the migrants who were residing in communities within their districts have now moved to other regions suggests that step migration is a common type of movement. We observe no international migration for this sub-group of migrants. We also find that migrants who were in another region in Ghana are most likely to still be in another region in Ghana. For international migration, the data, as presented in Table 2d shows that out of the 16 international African migrants in 2015, 18.8% (3 persons) have moved back to another region in Ghana whilst 75% (12) have remain international African migrant. Only one person (6.3%) have migrated to Europe. For international Europe migrants in 2015, we show that 40% remain in Europe whereas 60% have returned to other regions in Ghana. These results reflect the point that internal migration is more predominant in the selected regions than international migration.

Table 2d: Destinations of successfully tracked migrants from surveyed regions in both waves

	Location in 2018												Total	
Location in 2015	In a different community within this district		In another district in the same region		In another region in Ghana		International (Africa)		International (Europe)		International (Americas)			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
In a different community within this district(28)	6	21.4	8	28.6	14	50	0	0	0	0	0	0	28	100
In another district in the same region (55)	7	12.7	29	52.7	18	32.7	0	0	1	1.8	0	0	55	100
In another region in Ghana (152)	5	3.3	5	3.3	142	93.4	0	0	0	0	0	0	152	100
International (Africa) (16)	0	0	0	0	3	18.8	12	75	1	6.3	0	0	16	100
International (Europe) (5)	0	0	0	0	3	60	0	0	2	40	0	0	5	100
International (Americas)	0	0	0	0	0	0	0	0	0	0	1	100	1	100
Total	18	7	42	16.3	180	70	12	4.7	4	1.6	1	0.4	257	100

4.3. Incidence of Migration by Socio-Demographic Variables

We also examined the relationship between demographic characteristics (gender and age) and migration. As shown in Table 3, the incidence of migration among men rose from 14.7% in 2015 to 21.8% in 2018, while the incidence of migration among women increased from 9.8% in 2015 to 15.9 % in 2018. Thus, over the past three years, the incidence of migration among men increased by 48% while the incidence of migration among women increased by 62%. The evidence shows that even though migration in Ghana is still male dominated, the rate at which females are migrating is much higher than the rates at which males are migrating. The evidence gives credence to the observed feminization of migration (see Acharya, 2010; Cortes, 2015). The feminization of migration is partly attributed to urbanization as women are becoming more visible in labor migrants streaming to urban areas due to changing gender roles (Guilmoto , 1998; Chant, 1992;). In Ghana, an increasing number of women are migrating independently from rural areas to work in the informal sectors of urban areas (Awumbila et al, 2011).

Table 3: Migration incidence by age and sex of migrants

Age Category	2015								
	Male			Female			Total		
	all males	migrants	%	all female	migrants	%	all	migrants	%
10-15	488	25	5.1	496	31	6.3	984	56	5.7
16-20	483	48	9.9	442	46	10.4	925	94	10.2
21-30	828	188	22.7	796	134	16.8	1624	322	19.8
31-40	530	124	23.4	543	64	11.8	1073	188	17.5
41-56	494	67	13.6	527	28	5.3	1021	95	9.3
57 plus	346	13	3.8	391	11	2.8	737	24	3.3
Total	3,169	465	14.7	3,195	314	9.8	6364	779	12.2
Age Category	2018								
	Male			Female			Total		
	all males	migrants	%	all female	migrants	%	all	migrants	%
10-15	640	44	6.9	592	51	8.6	1232	95	7.7
16-20	588	89	15.1	537	79	14.7	1125	168	14.9
21-30	1,117	359	32.1	1,086	299	27.5	2203	658	29.9
31-40	728	260	35.7	700	144	20.6	1428	404	28.3
41-56	664	136	20.5	733	70	9.5	1397	206	14.7
57 plus	452	26	5.8	523	20	3.8	975	46	4.7
Total	4,189	914	21.8	4,171	663	15.9	8360	1577	18.9

As shown in Table 3, in both 2015 and 2018, the incidence of migration rises with age to a peak among 21--40-year group and then declines. Thus, in both waves, the propensity to migrate

increases with age to the middle age group and then declines. While the incidence of migration basically increased among all the age groups for both males and females, the increase in incidence of migration among young persons is noteworthy. Indeed, between 2015 and 2018, the incidence of migration among younger household members (10-15 years) increased by 35% among females (i.e from 5.1% to 6.9%) and by 37% among males (i.e from 6.3% to 8.6%). Similarly, the incidence of migration among persons in the 16 -20 year group increased by 53% among males (i.e. from 9.9% to 15.1%) and 41% among females (i.e. from 10.4% to 14.7%).

The incidence of migration also varies across educational attainment categories. It is observed that while people within all categories of education are likely to migrate, the slightly more educated are more likely to migrate compared to the less educated. For example, of all primary school leavers captured in the survey, 12.9% and 17.3% are migrants in 2015 and 2018 respectively, whereas 28.6% and 35.8% of secondary school graduates are migrants in 2015 and 2018 respectively. On the other hand, 28% and 44.9% of tertiary graduates captured in our surveys in 2015 and 2018 are migrants. One reason for the higher incidence of migration among educated people is the fact that they tend to possess more information about employment opportunities in urban areas. According to Van der Geest (2011:170) educated persons in northern Ghana prefer to migrate to urban centres than less educated people Van der Geest.

4.4. Multivariate Analysis of Propensity to Migrate in 2015 and 2018

Even though the descriptive statistics on the incidence of migration are useful to the extent that they provide a very simple way of establishing association between migration incidence and other important variables of interest to this study, they are limited because other factors may also have influence on the variables being considered. Thus, the associations do not control for the effect of other variables. Given the limitation of descriptive statistics that are based on cross-tabulations, we employed econometric analyses to enhance our understanding of factors that might influence migration decisions in the regions selected for our study and whether the drivers have changed over the 3 years of the study. The econometric results are presented in Appendix I. Appendix II present similar econometric specification as in appendix I but controlling for consumption quintiles. For the 2018 model presented in appendix II, we also control for whether a person was a migrant in 2015. The results and interpretations of the effect of all other variable as presented in both appendices (I & II) are qualitatively similar.

From Appendix I, column 1 presents the coefficient estimates whereas column 2 presents the marginal effects of the variables for 2015. The interpretation of the key results and patterns are based on the marginal effect estimates. From the results as presented in Appendix 1 and column 2 for 2015, females are less likely (about 3%) to migrate than males after controlling for individual, household and community–level characteristics. For 2018, consistently, we find that females are less likely to migrate than males. This is not the end of the gender story. Based on the coefficient on the female head variable, we find that while the coefficient on the female head variables were not significant in the 2015 model, this coefficient is significant and positive in the 2018 model. This estimation result suggests that migrants are more likely to come from female headed households than male headed households. This evidence is supported by the earlier finding that males are more likely to migrate than females and therefore the absence of the male from the household makes the woman a *de facto* household head. Thus, the likelihood that migrants come from a female headed household in 2018 is about 2% more than in a male headed household (significant at the 1 percent level).

With regards to real consumption per capita, our data appear to suggest that a higher household consumption is negatively related to the probability of a person migrating in 2015 (at 1 percent level of significance). The same relationship is weak in 2018, significant at 10 percent level. In appendix II, instead of consumption as a continuous variable, we include household consumption quintiles. The result on the effect of household consumption on migration in appendix II is similar to our conclusion on consumption in appendix I. In terms of landownership as a driver of migration, we find no significant effect of landownership in both 2015 and 2018. What seems to consistently drive migration in both 2015 and 2018 is the number of migrants from the district and having a network at destination. The coefficients for both variables are positive and significant at the 1 percent level in both 2015 and 2018, signalling the role of social networks in the migration ecosystem.

Another interesting result of the study is that whereas in 2015 dependency ratio tend to reduce the likelihood of migration, we find that for 2018 dependency ratio has insignificant effect on the likelihood of migration. Also, whereas in 2015 ethnic groups (Gruni and Grussi) were more likely to migrate than all other groups not specified here (the reference group), the Dagbani's were less likely to migrate. In 2018, only the coefficient for Gruni was significant at 10 percent level and also with an opposite sign. Thus, the evidence suggests that ethnicity is weak in explaining migration. From Appendix II, individuals from all the four regions in the model are less likely to migrate as compared to people in the Brong Ahafo region (2015 model). This result is stronger when the ethnic variables are removed from the model. The strength of association between

ethnicity and migration also increases when regional dummies are removed. If a person was a migrant in 2015, it is highly likely that such a person would be a migrant in 2018 (significant at 1 percent level). To summarize, as explained earlier, we find that one of the important drivers of migration in both 2015 and 2018 is social networks measured by the number of migrants from the district and having a contact at destination. Thus, our findings show that social networks are very important for migration than perceived ethnic and regional differences. Lastly, the our probit regression result shows that migrants in 2015 are approximately 12% more likely to be migrants in 2018 compared with non-migrants in 2015.

4.5. Migration Processes and Economic Activities of Migrants

This section focuses on analysis of the migration process itself. It specifically examines changes in reasons for migration, sources of financing migration and the role of social networks in the migration process.

4.5.1 Reasons for Migration

It is known that households migrate for many reasons (Eacott & Sonn, 2006). Table 5 examines whether there are have been changes in the strength of the push and pull factors that drive migration over the 3 years of the study. For 2018, about 63.5% of survey respondents at migrant source regions attributed migration of their household members to work related; notably seeking work/ better job (55.6 percent) and job transfers (7.9 percent). This was confirmed by interviews with rural-urban migrants in Accra as 72% of them attributed their migration to work-related reasons. As shown in the statements below, some migrants in the urban areas explained that as a result of spatial inequalities in employment opportunities, they have no choice than to move to Accra:

“I came here because there are no jobs in my village. When we completed school, I stayed there for three years but there was nothing for me to do. My friends who were staying in Accra convinced me to join them here and I think it is good I came. What I get as a security man is far higher than what I would have gotten from farming. So you see everybody is coming to Accra because there are no jobs in the other regions (Yure, 34 year-old- male migrant from northern Region)”

“We are 5 siblings and all of us have moved to Accra. Only our parents are in Mepe now, We would have preferred to stay in our own region but there is no work there. I am selling here in

Accra and I make some good profit but there [Mepe] no business is good. As there is no work there people are poor so nobody will buy whatever goods you send there to sell (Aveto, 41 year-old female migrant from Volta Region)

As highlighted by Aveto's statement, apart from inequalities in formal jobs opportunities, opportunities to earn higher income in the informal sector is also greater in Accra and other urban areas and this explain why many people continue to migrate to urban centres in Southern Ghana.

Study training is the second major reason for migration, with 16.8 percent of the sample migrating in order to study or receive some training. This evidence supports earlier studies that show that migration in Ghana is mostly due to inequalities in development indicators which necessitates migration to more developed regions for work and education (Black et al. 2006; Awumbila et al. 2011). About 7 percent of migrants also moved for the purpose of getting married, whereas 8 percent migrate for family reasons. Less than 5 percent of Ghanaians migrate for the purposes of accompanying family (1 percent), family dispute (1 percent), declining yields in agriculture (0.7 percent), medical treatment (0.4 percent), to join friends (0.2 percent), drought (0.1 percent) and civil war (0.1 percent).

Examining changes in the reasons given for migration between 2015 and 2018, we find that economic reasons for migration have increasingly become critical. For example, while 49.6 percent migrated to seek work or better job opportunities in 2015, the share of migrants that migrated to seek work or better job opportunities increased to 55.3 percent in 2018. The share that migrated for study and training reasons have increased marginally from 14.3 percent in 2015 to 16.8 percent in 2018. Interestingly, the share that reported marriage as a reason for migration have increased, from 4.5 percent to 7.4 percent. Migration reasons that have lost importance between 2015 and 2018 includes accompanying family and declining yields in agriculture (See Table 4).

Table 4: Reasons for Migration

Reasons	2015						2018					
	Male		Female		Total		Male		Female		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Job transfer/opportunity	49	11.4	29	10.2	78	10.9	80	8.8	45	6.8	125	7.9
Seek work/better job	276	64.3	78	27.5	354	49.6	625	68.5	251	37.9	876	55.6
Study training	36	8.4	66	23.2	102	14.3	139	15.2	125	18.9	264	16.8
To get married	4	0.9	28	9.9	32	4.5	7	0.8	110	16.6	117	7.4
To accompany family	7	1.6	5	1.8	12	1.7	5	0.5	11	1.7	16	1
To join family	21	4.9	42	14.8	63	8.8	35	3.8	94	14.2	129	8.2
Declining yields in agriculture	13	3	4	1.4	17	2.4	8	0.9	3	0.5	11	0.7
Civil conflict/war	1	0.2	-	-	1	0.1	-	-	1	0.2	1	0.1
Family dispute	2	0.5	1	0.4	3	0.4	4	0.4	11	1.7	15	1
Drought	1	0.2	-	-	1	0.1	1	0.1	-	-	1	0.1
To join friends	3	0.7	1	0.4	4	0.6	3	0.3	-	-	3	0.2
For medical treatment	2	0.5	1	0.4	3	0.4	2	0.2	4	0.6	6	0.4
Others	14	3.3	29	10.2	43	6	4	0.4	8	1.2	12	0.8
Total	429	100	284	100	713	100	913	100	663	100	1576	100

Given the recent policy discussions on the impact of environmental change on migration flows from dry regions (Teye and Owusu, 2015), the low proportion of migrants attributing migration to drought and declining agricultural yields was unexpected. However, this finding can be explained by the fact that although environmental change and associated declining yields tend to contribute to out-migration, they interact with economic factors (Van der Geest, 2011; Foresight 2011). Consequently, respondents in quantitative surveys are more likely to link their decisions to migrate to proximate economic opportunities (i.e. pull factors) at the destination (e.g. job opportunities) rather than the indirect push factors at the origin (such as environmental change declining yields). Indirect push factors, such as climate change, may only emerge more strongly during qualitative interviews (Awumbila et al, 2014)

We observed stark gender differences in the reasons given for migration in both 2015 and 2018. In 2018, for instance, males tend to migrate more for job search; 68.5 percent of males as against 37.9 percent of females migrate for job reasons. This is not surprising because in Ghanaian males are mostly considered the head of the household and as such, most of the family responsibilities lie on their shoulders. Females tend to migrate more (18.9 percent) for the purpose of study or

training than their male counterparts (15.2). Also, more females migrate to join family (14.2 percent) than males (3.8 percent). This is as the result of the fact that more males tend to migrate in search of greener pastures and hence their spouse along the line migrates to join them. As expected, more females tend to migrate for marriage purposes (16.6 percent) compared to their male counterparts (0.8 percent). Comparing gender differences in migration between 2015 to 2018, we find that whereas in 2015, 27.5 percent of women migrated for the purpose of seeking work/better jobs, after 3 years in 2018 we find that that share has increased to 37.9 percent. The evidence shows that the economic reasons for migration is increasingly becoming important for women in Ghana. For men, there was a marginal increase in job search reasons from 64.3 percent to 68.5 percent.

Table 5a and 5b further present the distribution of reasons for migration according to other background variables; namely age and income quintile between 2015 and 2018 respectively. The data shows that the share of younger people migrating for study and training reasons have increased considerably. For example, whereas in 2015 about 19.4 percent of migrants within the 21-30 age group migrated for study or training reasons, that proportion has increased to 42.4 percent in 2018. Also, while household within the lower consumption quintiles were more likely to have a migrant in 2015, there was no clear-cut association between consumption quintiles and migration in 2018, an indication that other reasons for migration, such migrating for studies or training are becoming more critical as drivers of migration than the current poverty status. This result is also an indication that migrants desire to break intergenerational poverty than address current poverty, by investing in human capital and skills needed for higher future incomes.

Table 5a: Percentage Distribution of Reasons for Migration in 2015 by Gender, Age and Income Quintile

Reasons for migration	Job transfer/ opportunity		Seek work/ better job		Study Training		To get married		To accompany family		Others		No of respon dents
	N	%	N	%	N	%	N	%	N	%	N	%	
Age													
10-15 y	2	4.2	17	35.4	7	14.6	2	4.2	1	2.1	19	39.6	48
16-20 y	5	5.3	30	31.9	28	29.8	3	3.2	0	0	28	29.8	94
21-30 y	38	12.5	148	48.7	59	19.4	17	5.6	5	1.6	37	12.2	304
31-40 y	22	13.2	100	59.9	9	5.4	6	3.6	3	1.8	27	16.2	167
41-56 y	5	6	53	63.1	3	3.6	2	2.4	2	2.4	19	22.6	84
57 plus	5	16.1	14	45.2	0	0	4	12.9	2	6.5	6	19.4	31
Income quintile													
First	12	7.8	85	55.6	23	15	9	5.9	2	1.3	22	14.4	153
Second	14	10.9	67	52.3	22	17.2	3	2.3	1	0.8	21	16.5	128
Third	14	11.5	63	51.6	13	10.7	4	3.3	3	2.5	25	20.4	122
Fourth	11	9.9	50	45	22	19.8	6	5.4	2	1.8	20	18	111
Fifth	19	17.4	41	37.6	13	11.9	7	6.4	4	3.7	25	22.9	109

Table 5b: Percentage Distribution of Reasons for Migration in 2018 by Gender, Age and Income Quintile

Reasons for migration	Job transfer/ opportunity		Seek work/ better job		Study Training		To get married		To accompany family		Others		No of respon dent
	N	%	N	%	N	%	N	%	N	%	N	%	
Age													
10-15 y	2	1.6	14	1.6	45	17.2	1	0.9	27	18.6	6	12.2	95
16-20 y	7	5.6	48	5.5	75	28.6	7	6	22	15.2	7	14.3	166
21-30 y	44	35.2	376	43.2	111	42.4	64	54.7	45	31	12	24.5	652
31-40 y	44	35.2	266	30.6	25	9.5	35	29.9	22	15.2	12	24.5	404
41-56 y	23	18.4	139	16	6	2.3	9	7.7	19	13.1	10	20.4	206
57 plus	5	4	27	3.1	0	0	1	0.9	10	6.9	2	4.1	45
Income quintile													
First	23	18.4	177	20.2	52	19.7	35	29.9	26	17.9	8	16.3	321

Second	13	10.4	209	23.9	46	17.4	19	16.2	31	21.4	18	36.7	336
Third	20	16	169	19.3	53	20.1	23	19.7	37	25.5	5	10.2	307
Fourth	19	15.2	184	21	46	17.4	20	17.1	25	17.2	8	16.3	302
Fifth	50	40	137	15.6	67	25.4	20	17.1	26	17.9	10	20.4	310

4.6. Role of Social Networks in the Migration Process

The enabling role of social networks in the migration process has been quite extensively discussed in the literature (Woolcock and Narayan 2000; Teye and Yebleh 2015). Social contact at destination helps to reduce the monetary cost that is incurred through the provision of information on migration processes and employment. Social contact at the destination can also reduce the psychological cost of migration (Banerjee, 1983; Woolcock and Narayan 2000; Anjos and Campos 2015). The data on migrants with contact persons in destination is presented in Table 6. A majority of migrants (64.9 percent in 2015 and 60.6 percent in 2018) reported that they had a contact at the destination prior to migrating. In both waves of our study, the proportion of migrants that had contact at the destination was higher among women than men, but the gap is wider in 2018 where 54.2% of male migrants had a contact at the destination as against 69.4 % of female migrants having contact persons in their destination prior to migrating. The result suggest that more males are taking risk in terms of migrating without a contact person than females. A number of empirical studies in behavioural economics suggests that females are more risk averse than male and evidence can explain the higher risk-taking in migration among male migrants (Powell and Ansic 1997; Charness and Gneezy 2012).

Table 6: Migrant already had contact at destination

	2015		2018	
	N	%	N	%
<i>Gender</i>				
Male	261	62.4	498	54.2
Female	190	68.6	463	69.4
Total	451	64.9	961	60.6
<i>Category of migration</i>				
Internal migrant	418	64.8	825	60.4
International migrant	33	66	136	62.1
<i>Region</i>				
Brong Ahafo	110	64.3	146	63.8
Northern	71	68.9	142	53.2
Upper East	101	66.9	160	51.1
Upper West	57	54.8	94	45.4
Volta	112	67.5	419	73.6

When differentiated by the type of migration, we did not observe significant differences between internal and international migrants in reported reliance on contact persons in destination. Among migrants, 62.1 percent of international migrants reported that they had contact persons in destination, whereas 60.4 percent of internal migrants reported the same in 2018. The slightly higher reliance on contact person at the destination for international migrants for both 2015 and 2018 can be attributed, firstly, to the fact that the resources and the requirements for international migration far outweigh that of internal migration. Secondly, with international migration, the migrant is very far from home and hence there is the need for assurance that in case of emergency there may be someone to rely on. Regardless, these concerns also do exist to some extent for internal migrants as well.

In terms of regional distribution of migrants with contact persons, some interesting findings are observed over the 3-year period. Interestingly and increasingly, a huge number of migrants from the three northern regions are traveling without contact persons at the destination. For example, whereas in 2015 about 68.9 percent of migrants from Northern Region had a contact at the destination, in 2018 the percentage of migrants with contact at destination have reduced to 53.2 percent (almost half are travelling without). For Upper East region the percentage of migrants with contact persons at the destination reduced from 66.9 percent in 2015 to 51.1 percent in 2018. We also find a reduction in proportion of migrants from Upper West region with contact person from 54.8 percent in 2015 to 45.4 percent in 2018. Thus, for migrants from the Upper West more than half of the migrants in 2018 travel without a contact person at destination, suggesting increased risk-taking among migrant households from the Upper West Region. In contrast with the situation in the three northern regions, there has been an increase in the proportion of migrants from the Volta region relying on having a contact person(s) at destination before making the voyage. Specifically, whereas 67.5 percent of migrants from the Volta Region reported having a contact at the destination in 2015, the proportion of migrants from the Volta Region with contact (s) at the destination have increased to 73.6 percent in 2018. The proportion of migrants from the Brong Ahafo region that had contact persons before migrating has not changed significantly.

One important reason for migration from our surveyed regions is for employment or better employment opportunities. The natural question that follows is whether migrants have some form of guaranteed 'fixed' jobs prior to migrating. To answer and discuss this question, we present job attachment behaviour prior to migration in our 2015 and 2018 surveys. Table 7 presents job attachment differences between 2015 and 2018 as well as the association between job attachment prior to migration and some individual characteristics (namely gender, category of migrant and home region of migrant). First and foremost, we find that majority of the migrants in 2018 are migrating without any form of guaranteed employment compared to the situation in 2015. To be more specific, the proportion of male migrants having a job fixed for

them prior to migrating declined from 25.9 percent in 2015 to 17.6 percent in 2018. Similarly, the proportion of female migrants with jobs already fixed prior to migration declined from 15.1 percent in 2015 to 12.3 percent in 2018. Our results show that women are more likely to migrate without a job attachment. In putting our results into perspective, we find that even though a high number of women are migrating with a contact person at destination, increasingly, women are migrating without any employment attachment. Overall, having some form of job attachment prior to migration is quite low for both male and female migrants from our surveyed regions, and this situation is worsening as shown by the 2018 data. Increased sensitization could help reduced the risk of migration with prior job attachment.

We turn our discussion to exploring whether the type of migration necessitates the need or otherwise, for job attachment. In simple terms, we examine the association between internal and international migration on the one hand, and job attachment on the other. The data in Table 7 shows that a higher proportion of international migrants in 2018 (18.3 percent), compared to internal migrants (14.9 percent), had a guaranteed employment before making the decision to migrate. We also compared association between job attachment and regions of origin of the migrants. The regional data shows that Upper East Region has the highest number of migrants without job fixed prior to migration (93.3 percent), which is closely followed by Northern Region (91 percent) and Upper West Region (87 percent). Migrants from the Brong Ahafo and Volta regions have a relatively high number of job attachment in destination prior to migration compared to the other regions, 21 percent and 21.8 percent respectively. In terms of trend in job attachment prior to migration, we find that job attachment prior to migration has worsen for migrants from Northern, Upper East, Upper West and Volta regions, whereas it has marginally improved in 2018 for migrants from the Brong Ahafo region. In summary, we observe in the 2018 data that job attachment in the three northern regions (Northern, Upper East, Upper West) have worsened over the 3 years of the study.

Table 7: Distribution of migrants by whether jobs were fixed for them prior to migration by gender and category of migration

Variables	2015		2018	
	N	%	N	%
<i>Gender</i>				
Male	102	25.9	162	17.6
Female	39	15.1	82	12.3
Total	141	21.6	244	15.4
<i>Category of migration</i>				
Internal migrant	131	21.8	204	14.9
International migrant	10	21.7	40	18.3
<i>Region</i>				
Brong Ahafo	33	20.5	48	21
Northern	18	19.1	24	9
Upper East	34	23	21	6.7
Upper West	16	15.8	27	13
Volta	40	26.8	124	21.8

As a follow-up to our earlier discussions on job attachment, we examine for a sub-sample of migrants who had job attachment prior to migration, agents who helped in securing these jobs. Table 8 presents the information on persons who helped the migrants to find jobs prior to migrating. We find that, for both males and females, relatives at the destination (e.g. aunts, cousins etc.) played a critical role in securing jobs (21%in 2015 and 29% in 2018). Thus, the reliance on relatives for jobs prior to migrating have increased over the two waves. In touching on the role of employment agencies, we find that the proportion of migrants who rely on recruitment agencies for jobs is relatively high and has increased marginally from 16.1 percent in 2015 to 17.1 percent in 2018. This result suggests that recruiting agencies have become increasingly important in the migration ecosystem.

Table 8. Person who helped migrant to find job prior to migration

Person	2015					
	Male		Female		All	
	N	%	N	%	N	%
Self	19	18.3	7	17.9	26	18.2
Father	7	6.7	2	5.1	9	6.3
Mother	1	1	1	2.6	2	1.4
Siblings	18	17.3	4	10.3	22	15.4
Relative	15	14.4	4	10.3	19	13.3
Community members	4	3.8	1	2.6	5	3.5
Recruitment agent	17	16.3	6	15.4	23	16.1
Others	23	22.1	14	35.9	37	25.9
Total	104	100	39	100	143	100
Person	2018					
	Male		Female		All	
	N	%	N	%		
Self	31	19.3	11	13.8	42	17.4
Father	6	3.7	1	1.3	7	2.9
Siblings	20	12.4	5	6.3	25	10.4
Relative	33	20.5	23	28.7	56	23.2
Community members	4	2.5	1	1.3	5	2.1
Recruitment agent	30	18.6	12	15	42	17.4
Others	37	23	27	33.8	64	26.6
Total	161	100	80	100	241	100

4.7. Financing Migration

The mode of financing migration has implications for migrant protection, as some funding mechanisms are associated with debt bondage. Our findings suggest that increasingly, self-reliance is becoming a key mechanism of financing migration. The data, as presented in Table 9, shows that majority of migrants (75.3 percent in 2018 and 50 percent in 2015) depended on their personal savings for migration. This implies that a substantial number of migrants made their own financial preparation in their original location before embarking on the journey. This finding may also be due to the fact that many of the migrants only travelled in Ghana and the cost of travel is not very expensive. The proportion of migrants funding trips through loans from family and friends has increased from 6.1 in 2015 to 14.7% in 2018 when it became the second most important source of funding migration. Ilahi and Saqib (1999) using a standard life-cycle approach predicts that demand for extended family financing rises with migration costs. Because majority of migrants migrate to other places within the country or continent, domestic inflation in general and transportation inflation to be more specific, is crucial for migration cost. The average double-

digit inflation of 14.2% experienced between 2015 and 2018 in Ghana increased cost of living in Ghana, including internal migration cost. Even though 12.3 percent of migrants sold assets to aid in the migration process in 2015, that proportion has reduced drastically to 4 percent in 2018. Reliance on remittances from other migrants has reduced significantly from 7.4 percent in 2015 to 5.4 percent in 2018. Overall, we find evidence of increased self-financing of migration in the 5 study regions in Ghana.

Table 9: Source of Financing Migration by Gender and Wave (Multiple Responses)

	2015						2018					
	Male		Female		Total		Male		Female		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Savings	232	53.8	131	45.2	363	50.4	727	79.2	466	69.9	1193	75.3
Formal loan	8	1.9	10	3.5	18	2.5	6	0.7	2	0.3	8	0.5
Loan from family / friends	33	7.7	11	3.8	44	6.1	139	15.1	94	14.1	233	14.7
Borrowing from money lender	5	1.2	3	1.0	8	1.1	4	0.4	2	0.3	6	0.4
Advance from recruitment agent	1	0.2	2	0.7	3	0.4	4	0.4	5	0.8	9	0.6
Sale of assets	70	16.2	19	6.6	89	12.3	48	5.2	16	2.4	64	4.0
Gov't schemes	4	0.9	1	0.3	5	0.7	2	0.2	2	0.3	4	0.3
Scholarship			25	8.6			10	1.1			10	0.6
Remittances from other migrants in the HH	32	7.4			57	7.9	37	4.0	48	7.2	85	5.4
Others	103	23.9	115	39.7	218	30.2	97	10.6	136	20.4	233	14.7
Total	431	113.2	290	109.3	721	111.7	918	117.0	771	115.6	1585	116.4

4.8. Occupational Changes of Migrants

Two important benefits of migration are better jobs and remittances. We now turn our discussions to analysing changes, if any, in occupation of migrants after migration and the level of remittances received by households left behind. The observed differences in occupation for 2015 as well as 2018 are presented in Table 10. The data shows that migration has led to significant changes in the occupation of migrants. Before migration, majority of migrants from our surveyed regions were engaged in agricultural/farm activities (39.5 percent in 2015 and 35.3 percent in 2018). The share of migrants in agriculture after migration reduced to 20.19 percent

and 16.32 percent for 2015 and 2018, respectively. The reduction in migrant's involvement in agriculture after they have migrated is similar for all regions. The observed decline in involvement in agriculture upon migration is sharp for migrants interviewed in 2018 as compared to 2015 (i.e., 47 percent reduction in agricultural involvement in 2015 migrants interviewed against 53.72 percent reduction in agricultural involvement in 2018). About 90% and 97% of migrants who still remained in farming after migration in 2015 and 2018 respectively were mainly internal migrants. Many farmers tend to move from the savannah zone to forest zone where ecological conditions are more favourable to farmers (Van der Geest 2011). A significant number of migrants have made transition into mining, quarrying and masonry, with a notable increase in trading and self-employment.

Table 10: Migrants' Occupation (Before and After Migration)

Occupation	Before migration				After migration			
	2015	2015	2018	2018	2015	2015	2018	2018
	N	%	N	%	N	%	N	%
Farming	156	39.5	311	35.3	106	20.2	186	16.3
Fishing	13	3.3	11	1.2	13	2.5	17	1.5
Mining and quarrying	6	1.5	9	1.0	15	2.9	35	3.1
Masonry	14	3.5	28	3.2	35	6.7	37	3.2
Driving	15	3.8	38	4.3	30	5.7	60	5.3
Carpentry	3	0.8	14	1.6	9	1.7	12	1.1
Teaching	22	5.6	61	6.9	29	5.5	84	7.4
Manufacturing	0	0.0	8	0.9	5	1.0	25	2.2
Electrician	8	2.0	9	1.0	9	1.7	14	1.2
Trading	46	11.6	144	16.3	79	15	227	19.9
Self employed	22	5.6	52	5.9	38	7.2	74	6.5
Others	90	22.8	197	22.3	157	29.9	369	32.4
Total	395	100	882	100	525	100	1140	100

4.9 Migrant Remittances

Given that remittances are the most tangible link between migration and development (Ratha 2007), we also examine changes in remittance receipts from migrants by households left behind in our study by comparing real remittance received in 2015 to that of 2018 (Table 11). From the results presented in Table 11, we find that average annual cash remittance received by households in Ghana within the last 12 months prior to the research has increased between the

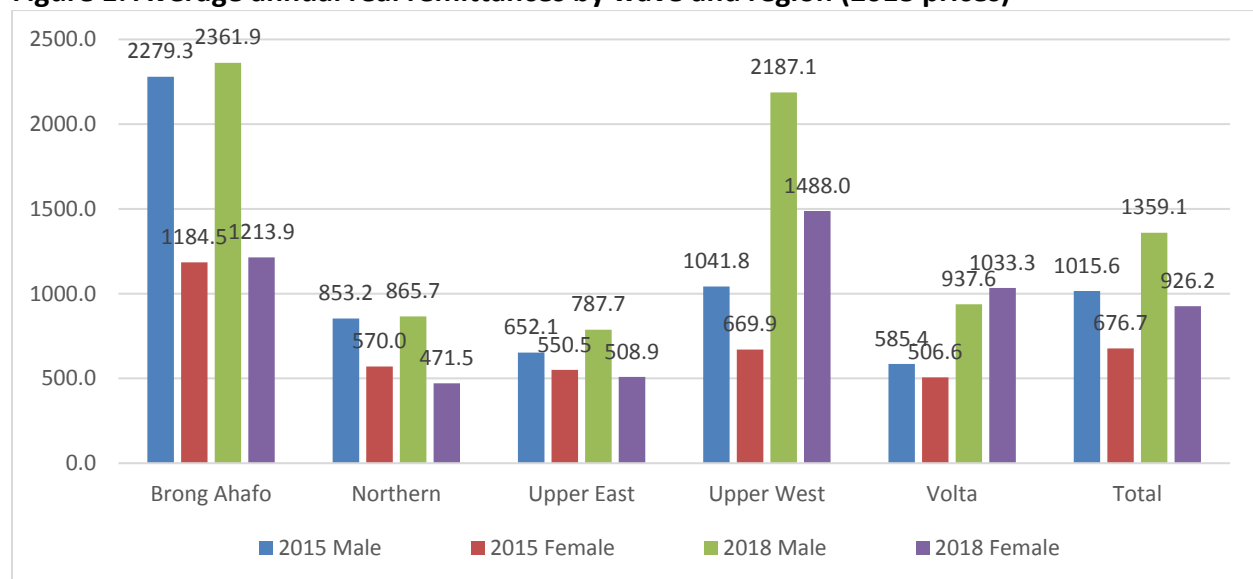
two waves. The average annual amount sent by males increased from GHC1073.7 in 2015 to GHC 1359.1 in 2018. Although the average annual amount sent by females increased from GHC 724.5 in 2015 to GHC 926.2 in 2018, male migrants sent more remittances, on average, than female migrants. From the table, it is obvious that international absent migrants sent more on average than internal absent migrants. This is highly expected as wages are on average relatively higher for international migrants than for internal migrants.

Table 11: Average annual amount of real cash remittances received from migrants within last 12 months by wave, gender and destination of the sender (GHC, 2018 prices).

Region	Male				Female				All
	mean	median	std	N	mean	median	std	N	Mean
	2015								
Internal migrant	885.9	420.2	1208	150	689.4	436	796.7	60	829.8
International migrant	2415.2	1474	2852	21	1777.2	1777	458.2	2	2359.7
All	1073.7	442.1	1578	171	724.5	472.3	809.2	62	980.8
	2018								
Internal migrant	974.1	500	1326	379	578.5	375	637.5	176	848.6
International migrant	2945.4	2000	2322	92	2201.5	1650	2050	48	2690.4
All	1359.1	600	1752	471	926.2	500	1285	224	1219.6

The average annual remittances sent home by migrants received at the regional level also shows an improvement in the amounts received (Figure 1). The average amounts sent by males increased from 2015 to 2018 for each region, although increases are small for male migrants from the Brong Ahafo, Northern and Upper East regions. The same can be said about amounts sent by females, although remittances fall slightly for migrants from the Northern and Upper East regions. A table with other statistics (median, standard deviation and frequencies) by gender, wave and region is presented in Appendix III

Figure 1: Average annual real remittances by wave and region (2018 prices)



In terms of regional breakdown of remittances sent to households (see Figure 2), comparing 2015 with 2018, Brong Ahafo, Northern and Upper West regions registered significant increases in the proportion of absent migrants that sent monies to their families left behind. On the other hand, the Upper East and Volta regions experienced a reduction in their respective proportions of absent migrants that sent monies to households left behind.

Figure 2: Proportions of absent migrants that sent monies to households left behind

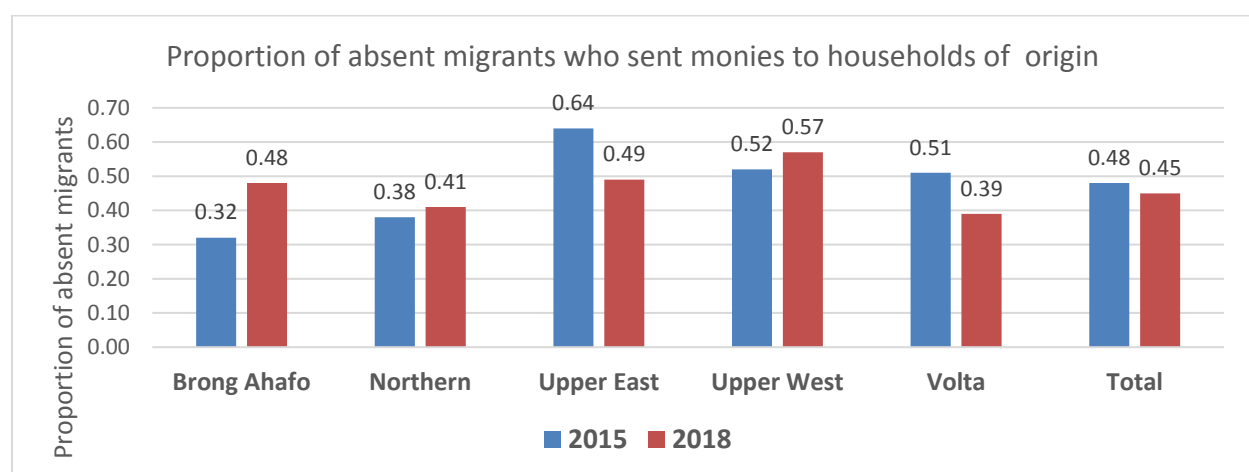
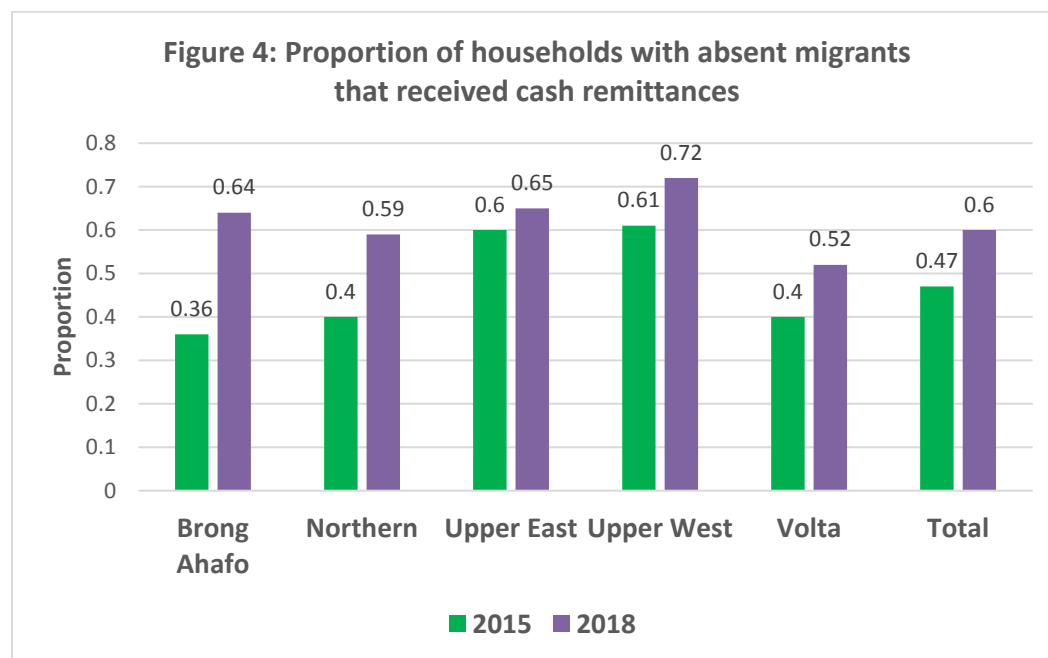


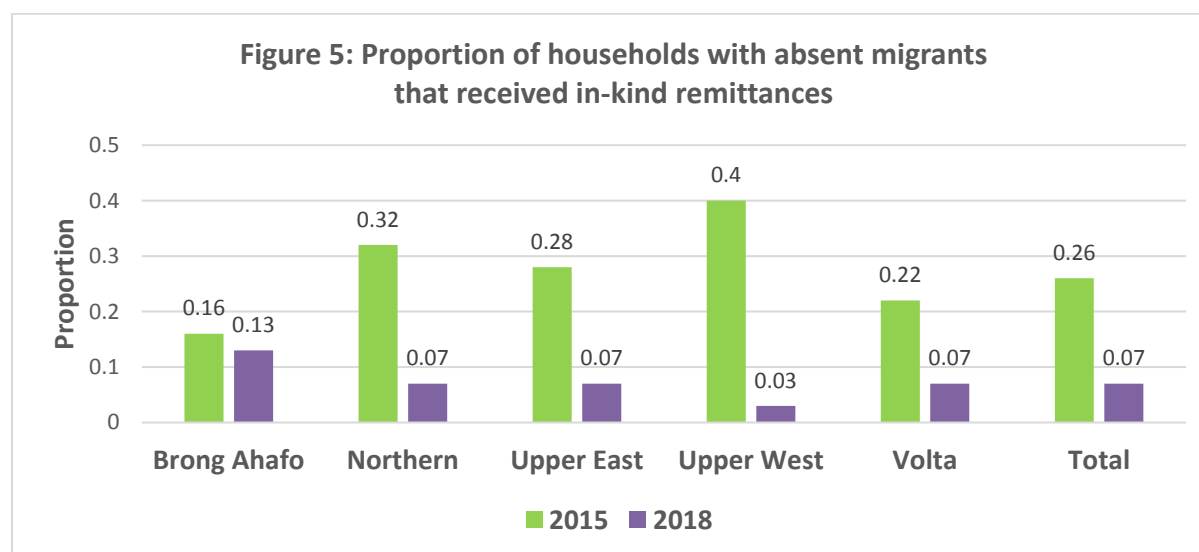
Figure 3: Proportion of households that received cash remittances



In Figure 3 above, we see the distribution of the proportions of households (with absent migrants) that received cash remittances (which given that some households have more than one migrant is different from the proportion of migrants who send money home). Unlike the proportions of migrants that sent monies to households of origin, a clear pattern emerges with the share of households that received cash remittances. Between 2015 and 2018, there were increases across regions in the proportion of households (with absent migrants) that received cash remittances. For example, the Brong Ahafo region registered a 28-percentage point increase from 36 percent (in 2015) to 64 percent (in 2018).

Interestingly, in the case of the receipt of in-kind remittances, a converse pattern is observed (see Figure 4). Without exception, households across the regions with absent migrants experienced considerable reductions in the proportions that received in-kind remittances. In some cases, the reductions were so drastic, as seen in the case of the Upper West region, where the proportion dropped from 40 percent (in 2015) to 3 percent in 2018. This decline may be explained by the fact that it is now easier to send cash, due to mobile banking. On the other hand, transportation costs in Ghana have increased tremendously due to rising fuel costs and this makes it difficult for migrants to send in-kind remittances.

Figure 4: Proportion of households that received cash remittances



Regarding the frequency with which migrants send remittances to households left behind, most migrants transferred remittances on special occasions. Specifically, 46.2 percent and 30.5 percent of migrants sent remittances on special occasions in 2015 and 2018, respectively. Given the unit costs associated with the transfer of money, it is not surprising that weekly and fortnightly transfers are the least common among migrants. In 2018 and 2015, only 1.1 percent of migrants sent remittances weekly, while 3.6 % and 1.7 percent of migrants interviewed in 2015 and 2018 respectively indicated sending remittances every fortnight.

Table 12. Frequency of transfers

Frequency of transfers	2015	2018
Weekly	1.1	1.1
Fortnightly	3.6	1.7
Monthly	14.7	19.5
Every couple of months	20.1	33.6
Every six months	7.5	5.4
Every year	6.8	8.3
Only on special occasions	46.2	30.5
Total	100.0	100.0

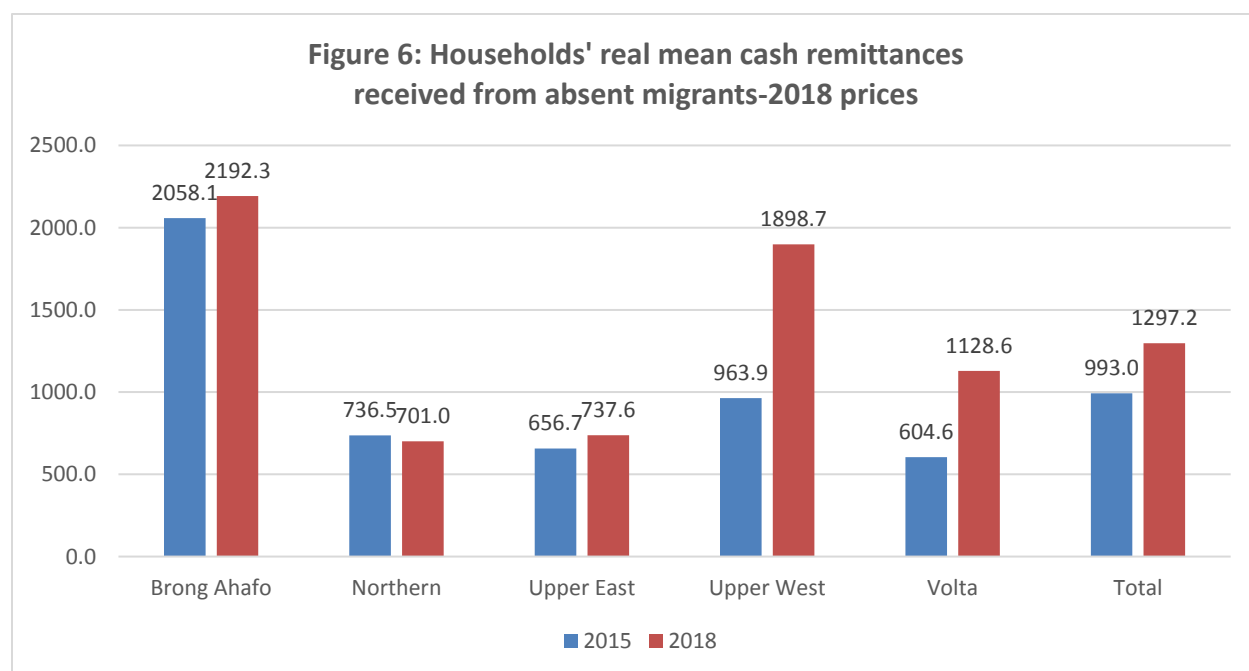
Expressing households' cash remittance receipts (from absent migrants) in constant 2018 prices (adjusting for inflation), we observe an appreciable increase in mean household cash remittance receipts between 2015 and 2018. Whereas the mean amount of cash remittances received by households in 2015 was GHC993, the corresponding amount for 2018 was GHC 1297.2 (see Table 13 and Figure 6). The regional breakdown of households' cash remittance receipts shows that

households in the Brong Ahafo region received, on average, the highest amounts of remittances in both 2015 (GHC 2058.1) and 2018 (GHC 2192.3). Except for households in the Northern region, households in each of the other four regions registered increases in mean cash remittances received from absent migrants. Households in the Upper West, Volta, and Brong Ahafo regions enjoyed marked increases in average cash remittances received from absent migrants (see Figure 17). It is worth noting also that cash remittances received by households from absent migrants were considerably more dispersed in 2018 than they were in 2015 (see Table 13).

Table 13: Total cash remittances received by households from all absent migrants by wave, gender of the household head and region (2018 prices)

Region	2015					2018				
	male head		Female head		All	male head		female head		All
	mean	N	mean	N	mean	mean	N	mean	N	mean
Brong Ahafo	1962.7	26	2306.0	10	2058.1	2144.3	62	2298.6	28	2192.3
Northern	804.1	24	330.6	4	736.5	693.1	75	775	8	701.0
Upper East	625.4	35	729.8	15	656.7	823.1	75	481	25	737.6
Upper West	881.7	29	1202.4	10	963.9	2224.7	62	979.8	22	1898.7
Volta	754.2	21	362.9	13	604.6	1172.1	78	1082.8	74	1128.6
Total	989.8	135	1001.4	52	993.0	1352.3	352	1173.7	157	1297.2

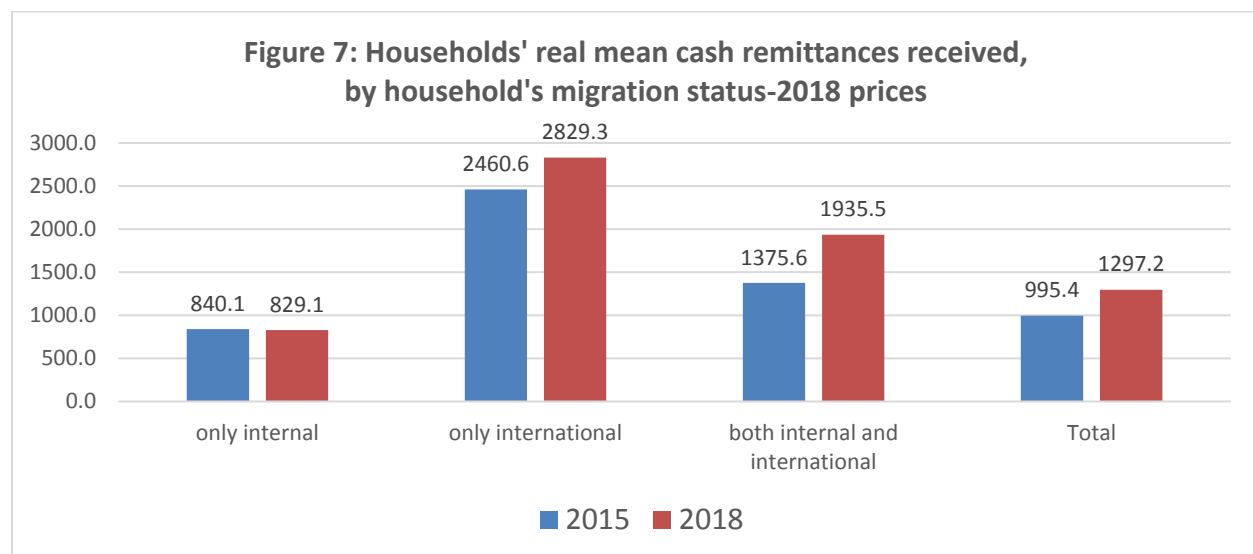
Figure 6: Households' real mean cash remittances



It is useful to discuss the association between households' cash remittance receipts and the migration status of the household. In the context of remittances received from absent migrants,

the relevant household categories for which we discuss associations are households with internal migrants only, those with international migrants only, and households with both internal and international migrants. As presented in Figure 7, we find that for each household migration category, the mean real cash remittances (received from absent migrants) have increased between 2015 and 2018, except for internal migrants only where there was a slight drop from GHC 840.1 to GHC 829.1. For example, in the case of households with international migrants only, the mean remittances received in 2018 exceeded the corresponding amount in 2015 by GHC 368.7 (see Figure 18). The statistics for households with both internal and international migrants also show that the 2018 mean amount of remittances received was GHC 559.9 higher than the amount received in 2015. These observations suggest that the overall increase in households' mean cash remittance receipts between 2015 and 2018 is driven mainly by increases in international migrant remittances.

Figure 7: Households' real mean cash remittances received by migration status



4.10. Effects of Migration on the Subjective Well-being of Migrant Households

It is legitimate to presume that the main reason underlying the decision to migrate is the anticipation of an improvement in welfare (Awumbila et al, 2016). It is therefore useful in this study to discuss the link between migration and welfare. In this paper, we carry out a preliminary analysis of the relationship between household migration status and the subjective well-being of the household.

Households left behind were asked about the adequacy of their current financial situation to meet their household needs. Table 14 compares the financial situation of households across the different migration statuses. Table 14 shows that, irrespective of their migration status, the proportion of households that subjectively reported improved financial situation within the last five years prior to the research was higher in 2018 than 2015. For example, 51.6 percent of households with internal current migrants perceive an improvement in their financial situation compared with 33.2 percent in 2015. Also, 67 percent of households with international current migrants felt their financial situation has improved in 2018 compared with 45.2 percent in 2015. In terms of returned migrant households, we find that in 2018, 53.9 percent of households with internal returned migrants perceived their financial situation has improved whereas in 2015, the corresponding statistic was 28.2 percent. We show that for subjective welfare, for any group of migrant households, 2018 registered a higher percentage of households perceiving an improvement in their financial situation compared to the 2015 statistic. Using the two waves of the survey data, our results confirm the findings in the literature that households with migrants, particularly with international migrants, tend to have enhanced household welfare (see Adams, 2007; Cuong 2009; Ratha 2010; Serbeh et al 2015).

Table 14: Subjective perception of change in financial situation in past 5 years by migrant type

	2015				2018			
current preference	Improved	Remained the same	Deteriorated	Total	Improved	Remained the same	Deteriorated	Total
Internal current	33.2	33.7	33.2	100	51.6	28.0	20.4	100
International current	45.2	16.7	38.1	100	67.0	15.7	17.3	100
Internal returned	28.2	29.6	42.2	100	53.9	28.6	17.6	100
International returned	40.0	0.0	60.0	100	42.4	33.3	24.2	100
Non-migrant	29.6	33.3	37.1	100	40.2	32.7	27.2	100
Total	31.2	32.2	36.6	100	50.0	28.0	22.0	100

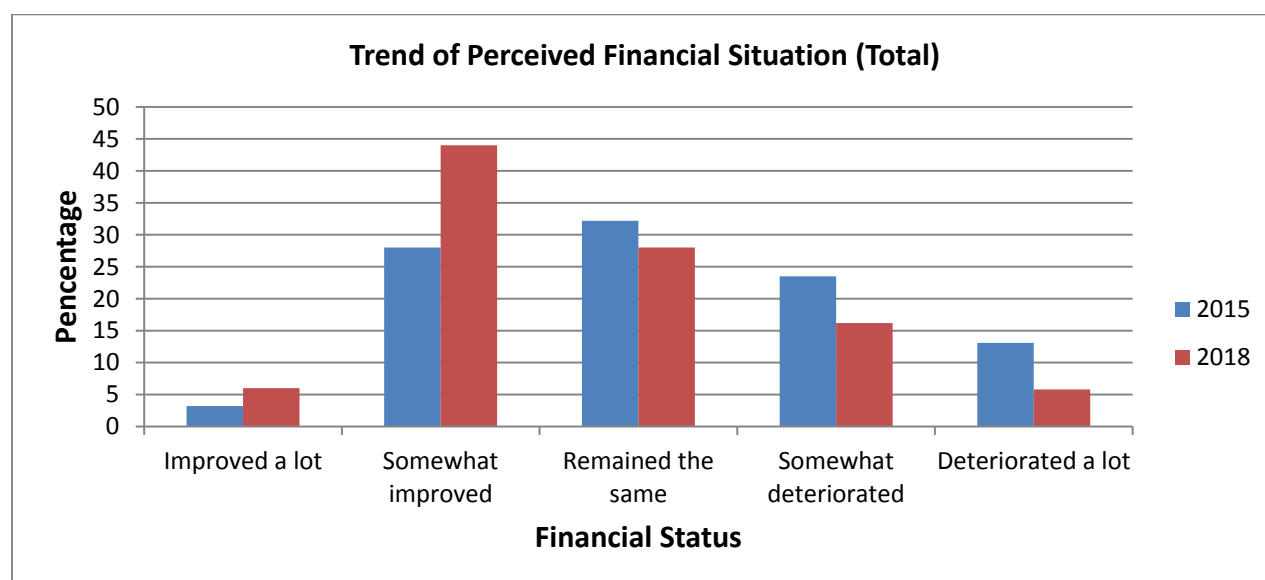
Table 15 presents evidence on gender differences in perceived changes in financial situations over the preceding two years. Whilst 52.6 percent of households with male heads perceived an improvement in their financial situation (improved a lot and somewhat improved) in 2018, the corresponding statistic for households with female heads is 43.7 percent. These figures in 2018 reflect an increase in perceived financial improvement over the 2015 figures. For example, in

2015, only 29.8 percent of female-headed households reported a perceived improvement in their financial situation, with the corresponding figure for male-headed households being 31.7 percent. Figure 11 shows, that overall, 2018 registered a higher percentage of households perceiving an improvement in their financial situation, that is, relative to the percentage of households that held such a view in 2015.

Table 15: Subjective perception of financial situation, by wave and gender of household head

Financial status	Male				Female			
	2015		2018		2015		2018	
	N	%	N	%	N	%	N	%
Improved a lot	28	3.5	61	6	7	2.4	25	6
Somewhat improved	227	28.2	472	46.6	81	27.4	157	37.7
Remained the same	262	32.6	274	27	92	31.1	126	30.3
Somewhat deteriorated	193	24	142	14	66	22.3	89	21.4
Deteriorated a lot	94	11.7	64	6.3	50	16.9	19	4.6
Total	804	100	1013	100	296	100	416	100

Figure 11: Subjective perception of change in financial situation over the past two years



Given that perception of wellbeing among households left behind may be different from perception of wellbeing among migrants, we also examined the perception of the 79 rural-urban migrants in Accra. The responses of the migrants support the survey data, as a majority of them (i.e. 65% of males and 36% of females) reported that their families would have been worse off if

they had not migrated. As shown in Box 1, these migrants cited several examples of how they are contributing significantly to the welfare of the family members back home, through remittances:

Box 1: Views of rural-urban migrants on how they are contributing the wellbeing of households at the origin

"My family would have been worse off if I had not migrated. I say that because my remittances back home helps the family a lot in their economic activities." (Aduty 20 year-old male migrants, Brong Ahafo)

"Migrating has given me good access to education and employment so that I am able to help those back home financially when the need arises." (Akra, 26 year-old migrant from Volta Region)

"If I were there I would be a burden to them and the little money they will get will be used on me of which they don't also have much, Being in Accra has made me secured a job and also taken care of the family back home. I would be worse if I hadn't come to Accra" (Gumah Shamuna, male, 28 years, Northern)

",,,, despite the fact that my monthly earnings is not that much I'm still able to send some to my parents and children which I won't have gotten that money if I was still in Upper West" (Dum, 44 year-old female migrants from, Upper West)

"Back home things were extremely difficult but now I can say with migration my family back home is financially better off with my help." (Awin , 39 year-old male migrants from Upper East)

On the other hand, only about 13% of male migrants and 6% of female migrants believed that their families back home would have been economically better off if they had remained at the origin. These migrants explained that migration has worsen the welfare of their households because they (migrants) are not doing well in the city and are unable to send remittances back home (see Box 2)

"Family would have been better off if I had not migrated because I really used to support them back home with the little income I was earning because I was not buying anything I eat free and drink free of charge. Now in my current state I buy everything including water to drink and bath." (Huvorimo, 23 year -old male migrants from Brong Ahafo)

"I'm not able to financially support them adequately since business is not moving on systematically. Thus, at times I can make more money at times too I lose." (Samil , 30 year- old migrant from Upper East)

"I would have earned more money than I get now. Without the stress of rents and utility bills would not have been there so my family would have benefited more from me." (Maryet, 30 – year-old male migrant from Volta region)

The migrants in Accra were also asked questions about how migration has contributed to their own wellbeing in the city. In response, about 73 % of the male migrants and 69% of female migrants reported that current wellbeing in Accra is better than it would have been if they had remained at the origin. The migrants gave several reasons why migration has enhanced their wellbeing and this includes availability of social amenities, employment opportunities, improved income, among others as cited bellow:

"I was looking for job and in depression. Migration has given me exposure and has trained in fitting / mechanic. I get jobs to do alongside which gives me money." (Gagu, 24 year-old male migrant from Volta Region)

"My current wellbeing here with migration is better off because out of what I get, I'm able to remit home and at least buy few basic stuffs for myself" (Wasila Iddrisu, female, 29 years, Northern)

I have access to better social amenities that I wouldn't have had if I were still at Abutiakope" (Amedzi, 22 year-old female migrant from Volta region)

"My current wellbeing without migration would have been worse off. Migration has really helped me because I'm able to save, buy basic things for myself and also remit home." (Adu Isaac, male, 20 years, Brong Ahafo)

On the other hand, a few rural-urban migrants (16% of males and 19% of females) feel that their wellbeing in the City is worse than it would have been in they had remained at the origin. These people also cited a number of reasons such as inability to get jobs, stressful life in Accra and low earnings:

"My wellbeing currently is worse off with migration. I am now unemployed" (Puri, 32 year-old female migrant from Brong Ahafo)

"This is due to the fact the cost of living back home is relatively cheap as compared to Accra. For instance I won't be paying rent and buying food stuffs at a high price whiles in Upper East such food stuffs are less expensive." (Samilatu, 30 year-old male migrant from Upper East)

"I'm not earning enough from my work and that has made life in Accra difficult. For instance, the little I earn cannot even feed me three times daily not to even talk about bills like rent and the others." (Tam 40 year-old male migrant from Upper East)

"This is because the cost of living in Accra is expensive as compared to Upper West and moreover I'm not working making things sometimes difficult." (Nyalat, 26 year-old female migrant from Upper West)

The revelation by these migrants that migration has worsened their wellbeing demonstrates that while migration to urban centres offer a number of opportunities to some people to enhance their livelihoods, it also sometimes leads to declining living standards, especially among those who are not able to secure good jobs.

5. Conclusion

This paper relied on two rounds of a household survey implemented in 2015 and 2018 to examine migration and remittance patterns, as well as the relationships between internal/intraregional migration and well-being of migrants' households in Ghana. The issues examined include the incidence and patterns of migration and remittance flows, differences in wealth between migrant and non-migrant households, factors influencing the propensity to migrate, and the association between migration and wellbeing. With the exception of the analysis of the propensity to migrate, we have generally employed descriptive statistics to examine the issues of interest.

We have demonstrated that the migration statuses of a majority of households remained the same. About 13% of persons categorised as non-migrants in 2015 became internal migrants by 2018. About 21% of internal return migrants and 25% of international return migrants in 2015 re-migrated by 2018. This suggests that re-integration processes are ineffective.

Despite media images and political narratives that suggest an exodus of Africans to Europe, internal migration is still a dominant form of migration in Ghana. Consistent with the literature on feminisation of migration (Acharya, 2010; Cortes, 2015), although migration in Ghana is still male dominated, the rate at which females are migrating is much higher than the rates at which males are migrating. Our multivariate analysis shows that social networks constitute an important determinant of the propensity to migrate. Whilst households within lower income quintiles were more likely to have a migrant in 2015, in 2018 there is no clear-cut impact of income quintiles on migration, an indication that other reasons for migration are becoming more important. Consistent with earlier findings (see Awumbila et al. 2011; Black et al. 2006), spatial inequalities in job opportunities still account for internal migration in the country. However, the proportion of migrants that migrated for marital purposes or education and training has

increased. Despite the prominence given to environmental drivers of migration in academic and policy circles (Teye and Owusu, 2015), only a few migrants reportedly moved because of environmental degradation.

We also observe gender differences in the reliance on social networks to facilitate migration, with women being more likely to have contacts at destination prior to migrating. The study also found that the proportion of migrants that relied on social networks at the destination for migration and employment declined among those from the three northern regions compared with their counterparts from Volta and Brong Ahafo regions. On the policy front, we argue that more sensitization and migration interventions may be needed in the three northern regions to help curb migration risk-taking. This is important to help address the exploitation of young migrants to large cities.

A majority of migrants in both waves depended on their personal savings for migration. This implies that a substantial number of migrants made their own financial preparation at their original location before embarking on the journey. The proportion of migrants funding the trips through loans from family and friends has increased between 2015 and 2018, while the proportion that financed migration through borrowing and sale of assets declined. Reliance on remittances from other migrants to fund migration has also reduced significantly between 2015 and 2018. Overall, we find evidence of increased self-financing of migration in the five study regions.

There is an increase in the amount of remittances received by households. Overall, female remittance amounts have seen some improvement since 2015. Our results confirm the findings in the literature that households with migrants, particularly with international migrants, tend to have enhanced household welfare compared to households with internal migrants (see Adams, 2007; Cuong, 2009; Ratha, 2010; Serbeh et al, 2015). The receipt of international remittances appears to be dominant in influencing welfare. Generally, households left behind believe that the migration of a member has improved the household's wellbeing. While some of the migrants in Accra complained about how migration has worsen their families' wellbeing because they are unable to good jobs, many of them reported that migration has enhanced their own wellbeing as well as the wellbeing of their families left behind. The findings suggest the need for policy makers to develop programmes to reduce the risks associated with migration and leverage remittances for poverty reduction in migrants' sending areas.

References

- Abdulai, A. (1999). "International Migration and Agricultural Development in Ghana" *Scandinavian Journal of Development Alternatives* 18 (1): 61-74
- Acharya, A. K. (2010). Feminization of migration and trafficking of women in Mexico. *Revista de cercetare si interventie sociala*, 30, 19.
- Adams, R. H. J. (2007). International remittances and the household: Analysis and review of global evidence. The World Bank.
- Adepoju, A. (2005). Patterns of migration in West Africa. In: *At Home in the World? International Migration and Development in Contemporary Ghana and West Africa* (T.Manuh, ed.). Sub-Saharan Publishers, Accra.
- Amin, S (ed). (1974). "Modern Migrations in West Africa". London, Oxford University Press
- Anarfi, J. K., Kwankye, S. O. with Ofosu-Mensah Ababio and Richmond Tiemoko (2003), Migration from and to Ghana: A Background Paper December 2003, DRC Working Paper C-4
- Ajaero, C.K., and Onokala, P.C., (2013) 'The effects of Rural-Urban Migration on Rural Communities of Southeastern Nigeria'. Department of Geography, University of Nigeria. *Nsukka 410001, Nigeria*
- Anjos, Carla, and Pedro Campos. (2015) "The role of social networks in the projection of international migration flows: An agent-based approach." *Work session on demographic projections* (2010): 305.
- Awumbila, M & Manuh, Takyiwaa & Quartey, Peter & Antwi Bosiakoh, Thomas & Addoquaye Tagoe, Cynthia. (2011). Migration and Mobility in Ghana: Trends, Issues, and Emerging Research Gaps.
- Awumbila, M., Owusu, G. and Teye, J.K. (2014). "Can Rural-Urban Migration into Slums Reduce Poverty? : Evidence from Ghana' Migrating Out of Poverty Working Paper 13, University of Sussex.
- Awumbila, M. (2015). Women Moving Within Borders: Gender and Internal Migration Dynamics in Ghana. *Ghana Journal of Geography*, 7(2), 132-145
- Awumbila, M. Teye, J.K. and Yaro, J. A (2016) "Of Silent Maids, Skilled Gardeners and Careful Madams: Gendered Dynamics and Strategies of Migrant Domestic Workers in Accra, Ghana", *Geojournal* DOI 10.1007/s10708-016-9711-5
- Banerjee, B. (1983). Social networks in the migration process: empirical evidence on chain migration in India. *The Journal of Developing Areas*, 17(2), 185-196.
- Bilsborrow, Richard E.; Amarjit Oberai, and Guy Standing, (1984). Migration Surveys in Low-Income Countries: Guidelines for Survey and Questionnaire Design. London and Sydney: Croom-Helm, for the International Labour Office, 552 pp.
- Black, R., Natali, C. and Skinner, J. (2006). Migration and Inequality. *Equity and Development* World Bank Report 2006, Background Papers.

- Castaldo, A., Deshingkar, P., and McKay, A. (2012) 'Internal Migration, Remittances and Poverty: Evidence from Ghana and India'. Migrating Out of Poverty Working Paper 7, University of Sussex.
- Charness, G., & Gneezy, U. (2012). Strong evidence for gender differences in risk taking. *Journal of Economic Behavior & Organization*, 83(1), 50-58.
- Chant, S. (1992). Migration at the margins: gender poverty and population movement on the Costa Rican periphery.
- Cortes, P. (2015). The feminization of international migration and its effects on the children left behind: Evidence from the Philippines. *World Development*, 65, 62-78.
- Cuong, et al, (2009) 'The Impact of Work Migration and Non-Work Migration on Household Welfare, Poverty and Inequality: New Evidence from Vietnam'. National Economics University, Vietnam.
- De Haas, H. (2008). *Migration and development: A theoretical Perspective*. International Migration Institute, Oxford.
- de Haas, H., (2010). Migration and development: A theoretical perspective. *Int. Migrat. Rev.*, 33: 227-264. DOI: 10.1111/j.1747-7379.2009.00804.
- Eacott, C., & Sonn, C. C. (2006). Beyond education and employment: Exploring youth experiences of their communities, place attachment and reasons for migration. *Rural Society*, 16(2), 199-214.
- Flahaux, M. L., & De Haas, H. (2016). African migration: trends, patterns, drivers. *Comparative Migration Studies*, 4(1), 1. <https://doi.org/10.1186/s40878-015-0015-6>
- Foresight (2011) Final Project Report: Migration and Global Environmental Change. London: The Government Office for Science.
- Ghana Statistical Service. (2007) 'Trends and patterns of poverty in Ghana, 1990–2005'. Report of the Ghana living standards survey. Ghana Statistical Service (GSS). Available at: http://www.statsghana.gov.gh/docfiles/glssUN5_report.pdf
- Ghana Statistical Service (GSS, 2008) 'Ghana Living Standards Survey: Report on the Fifth Round (GLSS 5)'. Accra: GSS.
- Ghana Statistical Service (GSS) (2012). 2010 Population and Housing Census. Summary Report of Final Results. Accra: GSS.
- Ghana Statistical Service (GSS, 2014) "Migration in Ghana". Accra: GSS
- Ghana Statistical Service (GSS) (2018). 'Poverty Trends in Ghana: 2005-2017'. August 2018. http://www2.statsghana.gov.gh/docfiles/publications/GLSS7/Poverty%20Profile%20Report_2005%20-%202017.pdf
- Guilmoto CZ. Institutions and migrations: Short-term versus long-term moves in rural West Africa. *Population Studies*. 1998;52(1): 85–103
- Hoddinott, J. (1994). A model of migration and remittances applied to Western Kenya. *Oxford economic papers*, 459-476.

- Ilahi, N. and Saqib, J. C. (1999). Guestworker migration, remittances and the extended family: evidence from Pakistan. *Journal of Development Economics*, 58 (2), 485-512.
- Lee, E. S. (1966). A Theory of Migration. *Demography*, 3, 47-57.
- Litchfield, J. and Waddington, H. (2003) *Migration and Poverty in Ghana: Evidence from the Ghana Living Standards Survey*. Sussex Migration Working Paper, No. 10. Brighton: Sussex Centre for Migration Research, University of Sussex
- Massey DS, Arango J, Hugo G, Kouaouci A, Pellegrino A, Taylor JE. (1993). Theories of international migration: A review and appraisal. *Population and Development Review* 19:431-66.
- Mazzucato, V., B. van der Boom and N. N. N. Nsowah-Nuamah (2005) 'Origin and Destination of Remittances in Ghana', in T. Manuh (ed.) *At Home in the World: International Migration and Development in Contemporary Ghana and West Africa*, pp. 139–52. Accra: Sub-Saharan Publishers.
- Mendola, M. (2011). *Rural out-migration and economic development at origin: A review of the evidence*. 24, 102–122. <https://doi.org/10.1002/jid.1684>
- Murrugarra, E., Larrison, J and Sasin, J. (eds.) (2011) *Migration and Poverty: Towards Better Opportunities for the Poor*. World Bank.
- OECD/ILO (2018). *How Immigrants Contribute to Developing Countries' Economies* © OECD/ILO 2018
- Powell, M., & Ansic, D. (1997). Gender differences in risk behaviour in financial decision-making: An experimental analysis. *Journal of economic psychology*, 18(6), 605-628.
- Quartey, P. (2006) *The Impact of Migrant Remittances on Household Welfare in Ghana*. Vol. 158. Nairobi, Kenya: African Economic Research Consortium.
- Quartey, P. (2009). *Migration in Ghana: A Country Profile 2009*. IOM, Geneva. Available from http://publications.iom.int/bookstore/free/Ghana_Profile_2009.pdf. Accessed 18/02/2013.
- Ratha, D. (2007), *Leveraging Remittances for Development*, Policy Brief, Migration Policy Institute, Washington D.C.
- Ratha, D. (2010), *Mobilize the Diaspora for the Reconstruction of Haiti, SSR Feature: Haiti: Now and Next* {<http://www.ssrc.org/features/pages/haiti-now-and-next/1338/1438/>}
- Ravenstein, E. G. (1885). The laws of migration. *Journal of the statistical society of London*, 48(2), 167-235.
- Serbeh, R., O. P. Adjei, and T. Yeboah (2015). "Internal migration and poverty reduction: rethinking the debate on the north-south movement in Ghana." *Journal of Social Sciences*, Retrieved from <https://doi.org/10.3844/jsssp>.
- Stark, O., (1991). *The Migration of Labor*. 1st Edn., B. Blackwell, Cambridge, ISBN-10: 1557860300, pp: 406.

- Switek, N. (2016) Inside the Europarty: research at the junction of party politics and European integration, *Journal of European Integration*, 38:6, 737-741, DOI: [10.1080/07036337.2016.1195196](https://doi.org/10.1080/07036337.2016.1195196)
- Teye, J.K., Alhassan, O., & Setrana, M. (2017). Evolution and Nature of Diaspora Engagement Policies in Ghana. 10.1007/978-3-319-50053-9_6. Savannah Zone of Ghana: In situ adaptation strategies and migration. In F. Hillmann, M. Pahl, B. Rafflenbeal & H. Sterly (Eds), *Environmental Change, Adaptation and Migration* (pp 223-244). New York: Palgrave MacMillan.
- Teye, J. K., Awumbila, M., & Benneh, Y. (2015). Intra-regional migration in the ECOWAS region: Trends and emerging challenges. In A., B. Akoutou, R. Sohn, M. Vogl & D. Yeboah (Eds), *Migration and Civil Society as Development Drivers - A Regional Perspective* (pp. 97-124). Bonn: Zei Centre for European Integration Studies.
- Teye, J. K & Owusu, K (2015). Dealing with climate change in the Coastal Savannah Zone of Ghana: In situ adaptation strategies and migration. In F. Hillmann, M. Pahl, B. Rafflenbeal & H. Sterly (Eds), *Environmental Change, Adaptation and Migration* (pp 223-244). New York: Palgrave MacMillan
- Teye, J. K., & Yebleh, M. (2015). Living without economic assets: Livelihoods of Liberian refugees in the Buduburam Camp, Ghana. *Journal of International Migration and Integration*, 16(3), 557–574
- Teye, J. K., Alhassan, O., & Setrana, M (2017). Evolution and nature of diaspora engagement policies in Ghana. In J. Mangala (Ed), *Africa and its Global Diaspora: The Policy and Politics of Emigration*. New York: Palgrave MacMillan (pp. 143-174)
- Todaro MP, Maruszko L. (1987). Illegal migration and US immigration reform: A conceptual framework. *Population and Development Review*, 13, 101-14.
- Twum-Baah, K. A (2005). "Volume and Characteristics of International Ghanaian Migration." In *At Home in the World? International Migration and Development in Contemporary Ghana and West Africa*, edited by T. Takyiwaa (ed), 55-77. Accra: Sub-Saharan Publishers, 2005.
- United Nations, Department of Economic and Social Affairs (UN DESA) (2018). *International Migration Report 2017*: United Nations: Geneva
- United Nations, Department of Economic and Social Affairs (UN DESA) (2019). *International Migration*. <https://www.un.org/en/development/desa/population/theme/international-migration/index.asp>
- Van der Geest, K (2011) "North-South Migration in Ghana: What Role for the Environment", *International Migration*, 49, 2011, 69–94.
- Woolcock, Michael, and Deepa Narayan. "Social capital: Implications for development theory, research, and policy." *The world bank research observer* 15.2 (2000): 225-249.
- Yaro, J.A (2008). *Migration in West Africa: Patterns, Issues and Challenges*. Unpublished paper

Appendix I

Determinants of Migration : probit models

Sample: Individuals 16-64 years old; dependent variable: current migrant equals 1 and zero otherwise				
	(1)	(2)	(3)	(4)
	2015		2018	
VARIABLES	b's	mfx	b's	mfx
Household real consumption per capita in hundreds (2018 prices)	-0.0184***	-0.0021***	-0.0040*	-0.0006*
	(0.0033)	(0.0004)	(0.0024)	(0.0003)
Household owns Land	-0.0642	-0.0075	0.0475	0.0068
	(0.0643)	(0.0075)	(0.0534)	(0.0076)
Number of migrants from the district	0.0058**	0.0007**	0.0032***	0.0005***
	(0.0024)	(0.0003)	(0.0011)	(0.0002)
Dependency ratio (below 16 and above 65/hh size)	-0.9095***	-0.1060***	-0.1913	-0.0274
	(0.1658)	(0.0195)	(0.1317)	(0.0189)
Education of person: base is none-Primary	-0.3547***	-0.0413***	-0.2787***	-0.0399***
	(0.1082)	(0.0127)	(0.0907)	(0.0130)
Middle/JSS	0.0595	0.0069	-0.0712	-0.0102
	(0.0854)	(0.0100)	(0.0700)	(0.0100)
High	-0.0230	-0.0027	0.2145***	0.0307***
	(0.0998)	(0.0116)	(0.0729)	(0.0104)
Tertiary	0.4172***	0.0486***	0.6032***	0.0863***
	(0.1292)	(0.0151)	(0.0845)	(0.0121)
Female	-0.2683***	-0.0313***	-0.4112***	-0.0589***
	(0.0600)	(0.0070)	(0.0491)	(0.0071)
Youth (15-24 years)	0.1058	0.0123	-0.0456	-0.0065
	(0.1613)	(0.0188)	(0.1350)	(0.0193)
Ethnic: Akan (all others as base)	0.0307	0.0036	0.0808	0.0116
	(0.1336)	(0.0156)	(0.1188)	(0.0170)
Ga-Dangme	-0.2004	-0.0234	-0.4983	-0.0713
	(0.2943)	(0.0343)	(0.4113)	(0.0589)
Ewe	0.0741	0.0086	0.2083	0.0298
	(0.1572)	(0.0183)	(0.1493)	(0.0214)
Guan	-0.2172	-0.0253	0.2339	0.0335
	(0.1890)	(0.0220)	(0.2232)	(0.0319)
Dagbani	-0.2230**	-0.0260**	0.1121	0.0160
	(0.0893)	(0.0104)	(0.0956)	(0.0137)
Gruni	0.5497***	0.0641***	-0.2014	-0.0288

	(0.1551)	(0.0181)	(0.1621)	(0.0232)
Grussi	0.4944	0.0576	-0.2477	-0.0355
	(0.3180)	(0.0371)	(0.2496)	(0.0357)
Female head	-0.0020	-0.0002	0.1535***	0.0220***
	(0.0706)	(0.0082)	(0.0567)	(0.0081)
Age of household head	0.0039**	0.0005**	0.0049***	0.0007***
	(0.0020)	(0.0002)	(0.0016)	(0.0002)
Education of household head: primary	0.0533	0.0062	0.0857	0.0123
	(0.1177)	(0.0137)	(0.1096)	(0.0157)
Middle/JSS	-0.1549*	-0.0181*	0.1616**	0.0231**
	(0.0932)	(0.0109)	(0.0720)	(0.0103)
High	0.0071	0.0008	0.0350	0.0050
	(0.1423)	(0.0166)	(0.0974)	(0.0139)
Tertiary	0.0168	0.0020	-0.0910	-0.0130
	(0.1243)	(0.0145)	(0.0905)	(0.0129)
age of person in years	-0.0072***	-0.0008***	-0.0091***	-0.0013***
	(0.0025)	(0.0003)	(0.0020)	(0.0003)
Region: Northern (Brong Ahafo as base)	-0.5059***	-0.0590***	-0.0882	-0.0126
	(0.1325)	(0.0155)	(0.1335)	(0.0191)
Upper East	-0.3209**	-0.0374**	0.1553	0.0222
	(0.1366)	(0.0160)	(0.1287)	(0.0184)
Upper West	-0.3056**	-0.0356**	0.1661	0.0238
	(0.1326)	(0.0155)	(0.1309)	(0.0187)
Volta	-0.2698*	-0.0314*	-0.0873	-0.0125
	(0.1577)	(0.0184)	(0.1467)	(0.0210)
Network at destination (Dummy)	3.1872***	0.3714***	4.5053***	0.6449***
	(0.1130)	(0.0137)	(0.3215)	(0.0462)
Constant	-0.6016***		-1.4155***	
	(0.2076)		(0.1714)	
Observations	4,958	4,958	6,658	6,658
Pseudo-R2	0.4657		0.499	
Standard errors in parentheses:*** p<0.01, ** p<0.05, * p<0.1				

Appendix II

Determinants of Migration (including consumption quintiles and controlling being a migrants in 2015 for the 2018 model) : probit models

Sample: Individuals 16-64 years old; dependent variable: current migrant equals 1 and zero otherwise				
	(1)	(2)	(3)	(4)
	2015		2018	
VARIABLES	b's	mf	b's	mf
Household owns Land	-0.0502 (0.0647)	-0.0058 (0.0075)	0.0009 (0.0545)	0.0001 (0.0075)
Number of migrants from the district	0.0055** (0.0024)	0.0006** (0.0003)	0.0033*** (0.0011)	0.0005*** (0.0002)
Dependency ratio (below 16 and above 65/hh size)	-0.9073*** (0.1663)	-0.1056*** (0.0195)	-0.1639 (0.1346)	-0.0226 (0.0185)
Education of person: base is none-Primary	-0.3547*** (0.1085)	-0.0413*** (0.0127)	-0.2672*** (0.0927)	-0.0368*** (0.0128)
Middle/JSS	0.0665 (0.0857)	0.0077 (0.0100)	-0.0326 (0.0715)	-0.0045 (0.0098)
High	-0.0188 (0.0999)	-0.0022 (0.0116)	0.2374*** (0.0743)	0.0327*** (0.0102)
Tertiary	0.4145*** (0.1294)	0.0482*** (0.0151)	0.6242*** (0.0860)	0.0860*** (0.0118)
Female	-0.2679*** (0.0601)	-0.0312*** (0.0070)	-0.3717*** (0.0500)	-0.0512*** (0.0069)
Youth (15-24 years)	0.1098 (0.1612)	0.0128 (0.0188)	-0.0443 (0.1363)	-0.0061 (0.0188)
Ethnic: Akan (all others as base)	0.0155 (0.1332)	0.0018 (0.0155)	0.0606 (0.1211)	0.0084 (0.0167)
Ga-Dangme	-0.2118 (0.2945)	-0.0246 (0.0343)	-0.5114 (0.4119)	-0.0705 (0.0568)
Ewe	0.0801 (0.1576)	0.0093 (0.0183)	0.1627 (0.1515)	0.0224 (0.0209)
Guan	-0.2156 (0.1900)	-0.0251 (0.0221)	0.2459 (0.2250)	0.0339 (0.0310)
Dagbani	-0.2180** (0.0902)	-0.0254** (0.0105)	0.0624 (0.0974)	0.0086 (0.0134)
Gruni	0.5263*** (0.1562)	0.0612*** (0.0182)	-0.3089* (0.1663)	-0.0426* (0.0229)

Grussi	0.5553*	0.0646*	-0.3034	-0.0418
	(0.3194)	(0.0372)	(0.2553)	(0.0352)
Female head	0.0063	0.0007	0.1546***	0.0213***
	(0.0706)	(0.0082)	(0.0577)	(0.0079)
Age of household head	0.0042**	0.0005**	0.0048***	0.0007***
	(0.0020)	(0.0002)	(0.0017)	(0.0002)
Education of household head: primary	0.0728	0.0085	0.0894	0.0123
	(0.1185)	(0.0138)	(0.1123)	(0.0155)
Middle/JSS	-0.1447	-0.0168	0.1847**	0.0255**
	(0.0936)	(0.0109)	(0.0734)	(0.0101)
High	0.0552	0.0064	0.0605	0.0083
	(0.1432)	(0.0167)	(0.0987)	(0.0136)
Tertiary	-0.0078	-0.0009	-0.0909	-0.0125
	(0.1243)	(0.0145)	(0.0921)	(0.0127)
age of person in years	-0.0073***	-0.0008***	-0.0090***	-0.0012***
	(0.0025)	(0.0003)	(0.0021)	(0.0003)
Region: Northern (Brong Ahafo as base)	-0.4950***	-0.0576***	0.0454	0.0063
	(0.1332)	(0.0156)	(0.1360)	(0.0187)
Upper East	-0.2985**	-0.0347**	0.2228*	0.0307*
	(0.1371)	(0.0160)	(0.1307)	(0.0180)
Upper West	-0.3274**	-0.0381**	0.2185	0.0301
	(0.1333)	(0.0155)	(0.1333)	(0.0184)
Volta	-0.2767*	-0.0322*	-0.0282	-0.0039
	(0.1581)	(0.0184)	(0.1486)	(0.0205)
Network at destination (Dummy)	3.1964***	0.3719***	4.5338***	0.6247***
	(0.1134)	(0.0138)	(0.3265)	(0.0451)
consumption quintile 2 (1 as base)	-0.2234***	-0.0260***	-0.0546	-0.0075
	(0.0818)	(0.0095)	(0.0691)	(0.0095)
consumption quintile 3	-0.2192**	-0.0255**	-0.0798	-0.0110
	(0.0862)	(0.0100)	(0.0738)	(0.0102)
consumption quintile 4	-0.4869***	-0.0567***	-0.0469	-0.0065
	(0.1012)	(0.0119)	(0.0807)	(0.0111)
consumption quintile 5	-0.6525***	-0.0759***	-0.0558	-0.0077
	(0.1229)	(0.0144)	(0.0939)	(0.0129)
migrant in 2015			0.8703***	0.1199***
			(0.0751)	(0.0103)
Constant	-0.7004***		-1.5744***	
	(0.2022)		(0.1768)	
Observations	4,958	4,958	6,658	6,658
Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1				

Appendix III

Average annual remittances sent by individual migrants by wave, gender and region in 2018 prices

Region	Male				Female			
	mean	median	std	N	mean	median	std	N
	2015							
Brong Ahafo	2279.3	1473.5	2457.7	32	1184.5	884.1	1144.7	13
Northern	853.2	683.0	710.5	24	570.0	508.6	421.2	9
Upper East	652.1	271.8	1297.2	63	550.5	271.8	1023.8	9
Upper West	1041.8	668.0	1102.5	38	669.9	296.9	783.0	12
Volta	585.4	420.2	716.9	34	506.6	343.2	459.9	26
Total	1015.6	442.1	1507.0	191	676.7	420.2	785.1	69
Region	2018							
	mean	median	std	N	mean	median	std	N
	2018							
Brong Ahafo	2361.9	1200.0	2361.8	72	1213.9	600.0	1373.4	33
Northern	865.7	400.0	1290.2	67	471.5	250.0	674.0	39
Upper East	787.7	400.0	1093.4	111	508.9	250.0	651.0	37
Upper West	2187.1	1500.0	1902.2	94	1488.0	1500.0	1288.1	25
Volta	937.6	400.0	1427.1	127	1033.3	450.0	1532.8	90
Total	1359.1	600.0	1751.9	471	926.2	500.0	1284.6	224

Household Consumption Calculations

The section on consumption expenditure includes separate food and non-food items. The food section requested for weekly food consumption. The values of all food items per week were summed, to obtain a household weekly consumption, which was then annualized by multiplying by 52. The nonfood section contains several items on a monthly basis. These were annualized, by multiplying by 12. The sum of these nonfood items was added to the sum of other nonfood items requested on an annual basis for each household. Thus, two variables for annual food expenditure and annual nonfood expenditure were computed in 2015 and 2018 values for each wave.

To obtain real values of expenditures in 2012 prices, the values for each household were deflated with an index. A regional inflation index (separate for food and nonfood) was computed using figures from the CPI reports of the Ghana Statistical Service, with 2012 as the base year (reported for each region in Table A1). The real values in 2012 prices of food and nonfood for each household were summed to arrive at annual household consumption. The poverty analysis in

the GLSS is based on adult equivalence. The adult equivalence, based on age and gender, which is used in the analysis of poverty for Ghana in the GLSS was replicated and used to divide the real values for each household to arrive at adult equivalent annual consumption for each household.

Table A1: Regional figures used to deflate to obtain real consumption in 2012 prices

Converting from 2015 to 2012 prices			Converting from 2018 to 2012 prices	
<i>Region</i>	<i>Food</i>	<i>Non-food</i>	<i>Food</i>	<i>Non-food</i>
BRONG AHAFO	1.22	1.6	1.487	2.605
NORTHERN	1.29	1.6	1.577	2.587
UPPER EAST	1.16	1.66	1.265	2.545
UPPER WEST	1.22	1.46	1.43	2.438
VOLTA	1.26	1.64	1.515	2.548

From the poverty report for GLSS7, the “poverty line of GH¢1,314.0 per adult equivalent per year and an extreme poverty line of GH¢792.2 per adult equivalent per year” were used in 2012/13 prices (Ghana Statistical Service, 2018, p9). A household is categorized as non-poor if the annual adult equivalent expenditure is above GH¢1,314.0, otherwise is it categorized as poor. The consumption quintiles were computed using the values for the annual adult equivalent expenditure at the household level.

Appendix IV: Some statistics generated with data from GLSS6 and GLSS7

Table A2: Ghana's changes in poverty incidence between 2012/13 and 2016/17

Region	Poverty incidence		Incidence of extreme poverty	
	2012/13	2016/17	2012/13	2016/17
Brong Ahafo	27.9	26.8	6.6	8.7
Northern	50.4	61.1	22.8	30.7
Upper East	44.4	54.8	21.3	27.7
Upper West	70.7	70.9	45.1	45.2
Volta	33.8	37.3	9	11.4
All Ghana	24.2	23.4	8.4	8.2

Source: Ghana Statistical Service (2018)

Table A3: Poverty incidence for Ghana's rural areas

Rural Area	2012/13 (GLSS 6)	2016/17 (GLSS 7)
Rural Western	29.8	29.7
Rural Central	23.7	20.4
Rural Gt. Accra	35.2	5.8
Rural Volta	39.0	46.6
Rural Eastern	29.8	19.1
Rural Ashanti	23.3	21.3
Rural Brong Ahafo	36.3	38.9
Rural Northern	61.1	74.3
Rural Upper East	50.1	64.8
Rural Upper West	80.3	80.5
Entire Country	24.2	23.4

Authors' computation from GLSS6 and GLSS7 datasets

About Migrating out of Poverty

Migrating out of Poverty research programme consortium is funded by the UK's Department for International Development (DFID). It focuses on the relationship between migration and poverty – especially migration within countries and regions – across Asia and Africa. The main goal of **Migrating out of Poverty** is to provide robust evidence on the drivers and impacts of migration in order to contribute to improving policies affecting the lives and well-being of impoverished migrants, their communities and their countries through a programme of innovative research, capacity building and policy engagement.

Migrating out of Poverty is coordinated by the University of Sussex and led by Research Director Dr Priya Deshingkar and Dr Robert Nurick as Executive Director. Core partners are the Centre for Migration Studies (CMS) at the University of Ghana, and the African Centre for Migration & Society (ACMS) at the University of the Witwatersrand in South Africa, the Organisation for Social Science Research in Eastern and Southern Africa (OSSREA) at Addis Ababa University, Ethiopia and L'Université Assane Seck Ziguinchor (UASZ) in Senegal. Past partners included the Refugee and Migratory Movements Research Unit (RMMRU) in Bangladesh, the Asia Research Institute (ARI) at the National University of Singapore; and the African Migration and Development Policy Centre (AMADPOC) in Kenya. Please visit the website for more information.

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